

# Petroleum Supply Monthly

Energy Information Administration  
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September 1984

Published:  
November 1984



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# Petroleum Supply Monthly



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The Energy Information Administration (EIA) has announced that petroleum supply statistics are now available on two magnetic tapes. One tape contains final 1983 petroleum supply statistics by month, taken from the *Petroleum Supply Annual*; the other contains 1984 statistics to date by month, from the *Petroleum Supply Monthly*. The first monthly tape released will be for the period January through June 1984. The monthly tape will be updated each month with the latest month's statistics. Both tapes include full documentation.

Tapes will be sold for \$140 each and should be referenced by NTIS number:

*Petroleum Supply Annual*—1983—#PB84-233022

*Petroleum Supply Monthly*—Cumulative 1984—#PB84-234418

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Further information as to content may be obtained from the National Energy Information Center (NEIC), telephone 202/252-1097. The current tape is also available on a subscription basis. Ordering information may be obtained by calling 703/487-4807.

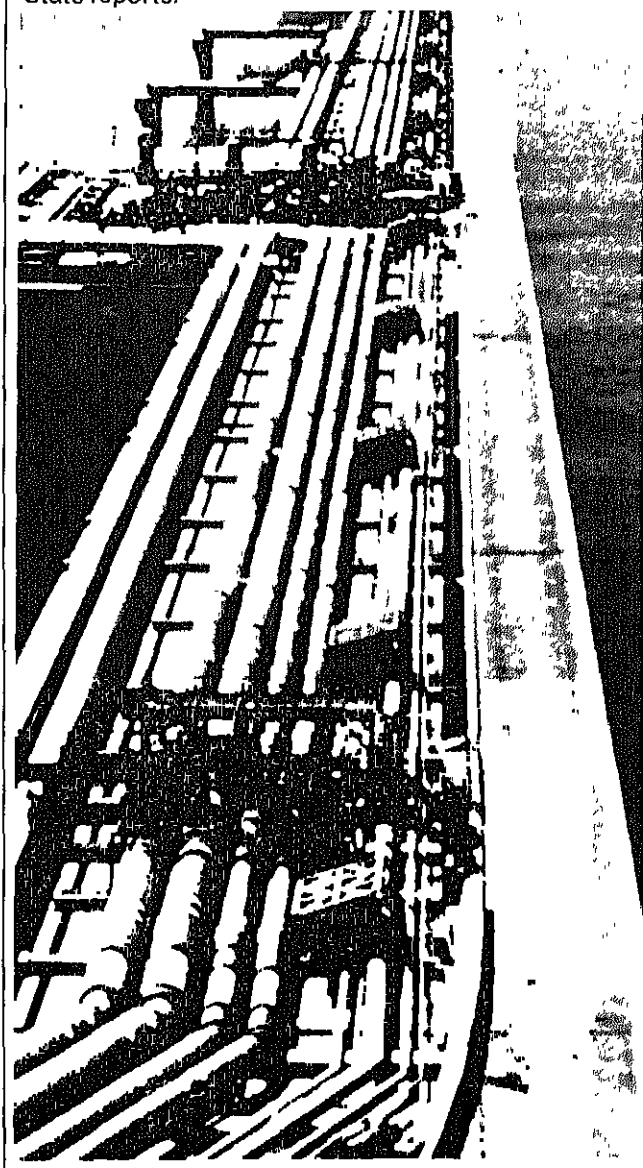
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## This Month in the PSM

This issue of the *Petroleum Supply Monthly* focuses on crude oil production statistics. "Comparisons of Independent Statistics on Petroleum Supply," compares data from EIA's *Petroleum Supply Annual* with statistics from independent sources both inside and outside EIA. This article, which begins on page xiii discusses EIA data series for crude oil imports, motor gasoline supplied, and distillate and residual fuel oil supplied, as well as crude oil production. A companion article, "An Evaluation of Crude Oil Production Statistics" beginning on page xvii compares crude oil production volumes reported in EIA's petroleum supply publications with those shown in State reports.



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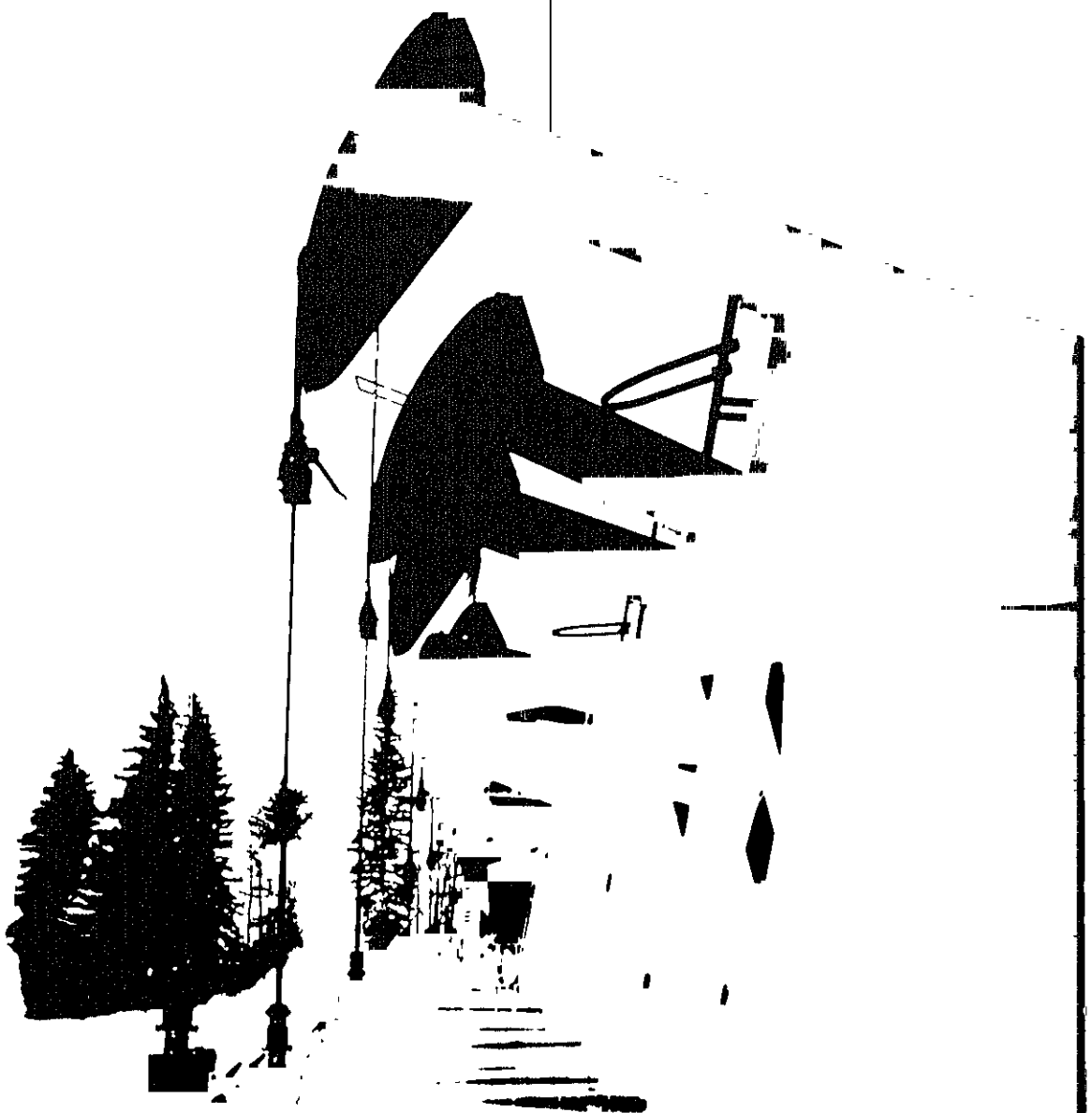


# Articles

Feature articles on energy-related subjects are frequently included in this publication. The following articles have appeared in previous issues of the *PSM*.

U.S. Petroleum Developments: 1981	Mar 1982
Timeliness and Accuracy of Selected Monthly Petroleum Supply Data	Apr 1982
Focus on Motor Gasoline Statistics	Apr 1982
Focus on Crude Oil Production Data	Apr 1982
Motor Gasoline Outlook: Summer 1982	May 1982
Gasoline Use in the United States	May 1982
The Impact of Changing Vehicle Characteristics and Use on Motor Gasoline Demand	May 1982
1982 EIA Petroleum Refinery Survey Results	Jun 1982
What is a Refinery?	Jun 1982
Mid-year Petroleum Supply Review	Jul 1982
Petroleum Imports and Exports	Aug 1982
Refinery Shutdowns During 1982	Sep 1982
Distillate Fuel Oil Outlook: Winter 1982-83	Sep 1982
Recent Trends in Fuel Oil	Sep 1982
Futures Trading on Heating Oil Markets	Sep 1982
U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1981 Annual Report	Oct 1982
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Major Energy Companies' Investment and Resource Development Patterns, 1974-80	Nov 1982
U.S. Petroleum Developments: 1982	Jan 1983
Trends in Petroleum Products Consumption, 1971-1982	Jan 1983
Refinery Shutdowns During 1982	Feb 1983
U.S. Petroleum Imports and Exports	Feb 1983
Petroleum Supply Reporting System Overview	Mar 1983
Summer Gasoline Overview	May 1983
Principal Factors Influencing Motor Gasoline Demand	May 1983
U.S. Petroleum Refinery Trends and Outlook	Jun 1983
Mid-Year Petroleum Review	Jul 1983
Timeliness and Accuracy of Selected Petroleum Supply Data Series	Aug 1983
Distillate Fuel Oil Overview: Winter 1983-84	Sep 1983
Fuel Oil Trends	Sep 1983
U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves	Sep 1983
LPG Market Trends	Nov 1983
National Petroleum Council Revises Minimum Operating Inventory Estimates	Dec(1) 1983
U.S. Petroleum Developments: 1983	Dec(2) 1983
An Overview of Petroleum Transportation	Dec(3) 1983
EIA Revises Petroleum Supply Reporting System	Jan 1984
Trends in Petroleum Product Consumption	Jan 1984
Petroleum Consumption in the Industrial Sector	Jan 1984
Motor Gasoline Outlook for Summer 1984	Feb 1984
Recent Motor Gasoline Trends	Feb 1984
New Patterns Emerging in U.S. Petroleum Imports and Exports	Feb 1984
Refinery Capacity Trends and Outlook	Apr 1984
Mid-Year Petroleum Review	Jun 1984
Timeliness and Accuracy of Selected Petroleum Supply Data Series	Jun 1984
Winter 1984-1985 Distillate Fuel Oil Outlook	Jul 1984
Distillate Fuel Oil Overview	Jul 1984
Recent Trends in Primary Petroleum Storage Capacity	Aug 1984
U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves	Aug 1984







# Petroleum Supply Summary

Average Volume for Period (Million Barrels Per Day)	October			Cumulative January Through October		
	1984	1983	% Change	1984	1983	% Change
<b>Products Supplied</b>						
Motor Gasoline	6.7	6.6	1.5	6.7	6.6	1.4
Distillate Fuel Oil	2.6	2.6	0.4	2.8	2.6	8.8
Residual Fuel Oil	1.0	1.2	- 18.0	1.4	1.4	- 2.3
Other Products	5.1	4.5	12.6	4.8	4.4	8.7
<b>Total</b>	<b>15.4</b>	<b>15.0</b>	<b>3.1</b>	<b>15.7</b>	<b>15.1</b>	<b>4.5</b>
<b>Crude Inputs to Refineries</b>	<b>12.2</b>	<b>11.8</b>	<b>3.7</b>	<b>12.1</b>	<b>11.7</b>	<b>3.5</b>
<b>Production</b>						
Crude Oil, Natural Gas Liquids, and Other <sup>1</sup>	10.6	10.4	1.1	10.4	10.3	1.0
<b>Imports</b>						
Crude Oil <sup>2</sup>	3.6	3.2	10.8	3.2	3.1	4.2
SPR	0.1	0.2	- 31.7	0.2	0.2	- 23.8
Products	1.8	1.8	1.7	2.0	1.7	16.7
<b>Total</b>	<b>5.6</b>	<b>5.3</b>	<b>6.0</b>	<b>5.4</b>	<b>5.0</b>	<b>7.1</b>
<b>Exports</b>						
Crude Oil	0.2	0.1	15.7	0.2	0.2	7.1
Products	0.5	0.4	15.1	0.5	0.6	- 13.3
<b>Total</b>	<b>0.7</b>	<b>0.6</b>	<b>15.3</b>	<b>0.7</b>	<b>0.8</b>	<b>- 8.9</b>
<b>Stock Withdrawal</b>						
Crude Oil <sup>2</sup>	- 0.2	- 0.1	—	(s)	(s)	—
Products	- 0.5	- 0.4	—	- 0.1	0.1	—
<b>Stocks at End of Period (Million Barrels)</b>						
<b>Crude Oil</b>						
SPR	436	367	18.7			
Other	337	349	- 3.4			
<b>Total</b>	<b>773</b>	<b>716</b>	<b>7.9</b>			
<b>Products</b>						
Motor Gasoline <sup>3</sup>	230	227	1.3			
Distillate Fuel Oil	155	163	- 4.6			
Residual Fuel Oil	50	51	- 2.7			
Other	326	350	- 7.0			
<b>Total</b>	<b>761</b>	<b>791</b>	<b>- 3.8</b>			
<b>Total Crude Oil and Products</b>	<b>1,534</b>	<b>1,508</b>	<b>1.7</b>			

1 Includes alcohol and other hydrocarbon liquids.

2 Excludes Strategic Petroleum Reserve (SPR).

3 Including blending components.

(s) = Less than 0.05 million barrels per day.

NOTE: Percent changes are based on unrounded values. October 1984 data are estimates based on weekly data, except for exports, NGL production, other hydrocarbons, and alcohol which are September 1984 monthly values. Totals may not be equal to sum of components due to independent rounding.

Source: Energy Information Administration, *Petroleum Supply Monthly*, September 1984.



# Comparisons of Independent Statistics on Petroleum Supply

The Petroleum Supply Division of the Energy Information Administration (EIA) operates a Petroleum Supply Reporting System (PSRS) that includes weekly, monthly, and annual surveys. Statistics based on weekly data and preliminary monthly data are published in the *Petroleum Supply Monthly (PSM)*. Final statistics for each year are published in the *Petroleum Supply Annual (PSA)*. Comparisons between the *PSM* and *PSA* statistics, such as the comparison of data for 1981 through 1983 published in the June 1984 *PSM*, help EIA assess, maintain, and improve the quality of its data.

To assess the quality of EIA's petroleum supply data further, this article compares final annual statistics from the *PSA*, (and its predecessor, the *Petroleum Statement, Annual*) with statistics from independent data sources both inside and outside EIA. The comparisons cover statistics for 1979 through 1983. Adjustments have been made, where possible, to some of the statistics to account for differences in coverage, definitions, and units of measure (see footnotes in Tables 1-5). When the statistical series differ widely among themselves, it suggests that there are problems with one or more of the series, or that they measure different phenomena. When all of the series are in close agreement, there is no indication of inaccuracy.

From 1981 to 1983, many significant changes were made to the petroleum supply survey forms, processing procedures, and publications. A description of these changes was published in the June 1984 *PSM*. The comparisons presented here indicate that these changes have maintained or improved the quality of the *PSA* statistics.

Statistics on crude oil production are in close agreement for all 5 years. Agreement on crude oil imports is nearly as close. Agreement between the *PSA* motor gasoline supply statistics and comparable statistics improved dramatically in 1981, when a major change was made to the collection of motor gasoline data (See Note 12, page 90). The overall pattern is one of consistent improvement, sometimes appearing to occur in the petroleum supply series, sometimes in the others.

## Crude Oil Production

Data on crude oil production developed for the *PSA* are based on data reported to EIA by State agencies and the U.S. Minerals Management Service. These data were compared with data developed by four other sources (Table 1).

**Table 1. Comparison of Estimates for Crude Oil (Including Lease Condensate) Production**

	Reference Estimate	Comparative Estimates			
	EIA, <i>Petroleum Supply Annual</i> <sup>1</sup>	American Petroleum Institute <sup>2</sup>	Bureau of the Census <sup>3</sup>	Oil & Gas Journal <sup>4</sup>	EIA Reserves and Natural Gas Division <sup>5</sup>
Volume (Million Barrels <sup>6</sup> )					
1983 . . . . .	3,171	3,175	N/A	3,161	3,177
1982 . . . . .	3,157	3,164	N/A	3,156	3,107
1981 . . . . .	3,129	3,140	3,112	3,135	3,110
1980 . . . . .	3,146	3,160	3,137	3,147	3,134
1979 . . . . .	3,121	3,130	3,047	3,168	3,102
Comparative Estimate as a Percent of the Reference Estimate					
1983 . . . . .	—	100.1	N/A	99.7	100.2
1982 . . . . .	—	100.2	N/A	100.0	98.4
1981 . . . . .	—	100.4	99.5	100.2	99.4
1980 . . . . .	—	100.4	99.7	100.0	99.6
1979 . . . . .	—	100.3	97.6	101.5	99.4

N/A = Not available

<sup>1</sup>From Table 2 in EIA's *Petroleum Supply Annual*, 1981 through 1983 and Table 6 in EIA's *Petroleum Statement, Annual*, 1979 and 1980.

<sup>2</sup>From issues of the American Petroleum Institute's *Monthly Statistical Report*. Annual values were obtained by summing monthly values.

<sup>3</sup>From Table 1 of the Bureau of the Census' *Annual Survey of Oil and Gas*, 1979 through 1981. This survey was discontinued in 1982.

<sup>4</sup>From issues of the *Oil and Gas Journal*. This journal publishes weekly averages of crude oil production in thousand barrels per day. These averages are used to produce monthly totals as follows: First, each week's average is used as a daily production estimate for each of the days the week covers. Then, for each month, the production estimates for the days covered by the month are summed. These totals are converted from thousand to million barrels.

<sup>5</sup>From EIA's *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report*, 1979 through 1983. Form EIA-23 is the source for crude oil production data in these publications.

<sup>6</sup>Volumes are rounded to the nearest million barrels. One barrel equals 42 U.S. gallons.

Note: Geographic coverage is the 50 United States and the District of Columbia with adjacent areas of the Outer Continental Shelf.

Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, *Petroleum Statement, Annual*, DOE/EIA-0108, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report*, DOE/EIA-0216; Bureau of the Census, *Annual Survey of Oil and Gas*; American Petroleum Institute, *Monthly Statistical Report*; *Oil and Gas Journal*.

- EIA conducts an "Annual Survey of Oil and Gas Reserves," Form EIA-23. This survey is not part of the PSRS, however, the report covers production information for crude oil and lease condensate. The data from this survey have differed by less than 1 percent from the PSRS data in 4 of the 5 years studied.
- Prior to 1982, the Industry Division of the Bureau of the Census conducted surveys that collected information on oil and gas field exploration, development, and production. The results of these surveys were published in the *Current Industrial Report, Annual Survey of Oil and Gas*. After its report on 1981 production, this survey was discontinued. In 1979 Census data differed from PSA data by 2.4 percent; the 1980 and 1981 data were within 0.5 percent.
- The American Petroleum Institute (API) *Monthly Statistical Report* is used as one of the comparative sources for crude oil (and lease condensate) production data. The API statistics compared here are based upon API monthly estimates. API data differed from PSA data by less than 0.5 percent in all 5 years studied.
- Each week statistics on a number of petroleum-related subjects, are published in the *Oil and Gas Journal*. Included is a weekly production report based on the *Journal's* estimate of crude oil and lease condensate production. From 1980 through 1983 the *Oil and Gas Journal* estimates were within 0.3 percent of the PSA data.

## Crude Oil Imports

The PSRS data on imports of crude oil are collected using Form EIA-814, Monthly Imports Report. These data have remained within about 2 percent of estimates by the Bureau of the Census and the API since 1979 (Table 2).

- Data from the Census Bureau's *U.S. Imports for Consumption and General Imports* series are compiled utilizing U.S. Customs Service documents on imports into the United States and its territories. Because these data contain imports into U.S. territories and PSA statistics do not, territorial imports reported in the Census Bureau's *U.S. Imports for Consumption and General Imports* publication were extracted from the Census total. In 1983, Census data differed from PSA data by 1.3 percent.
- Estimates of crude oil imports are published by the API in its *Monthly Statistical Report*. Because the API estimates do not include imports for the Strategic Petroleum Reserve, imports for the Strategic Petroleum Reserve were added to the API estimates. There was a 1.4 percent difference between API estimates and the PSA in 1983.

## Motor Gasoline Supplied

Beginning in 1981, the EIA made several changes to the motor gasoline portion of the PSRS. These changes in-

**Table 2. Comparison of Estimates for Crude Oil Imports**

	Reference Estimate	Comparative Estimates	
	EIA, <i>Petroleum Supply Annual</i> <sup>1</sup>	American Petroleum Institute <sup>2</sup>	Census/Customs Estimate <sup>3</sup>
Volume (Million Barrels <sup>4</sup> )			
1983	1,215	1,232	1,199
1982	1,273	1,275	1,300
1981	1,605	1,617	1,635
1980	1,926	1,917	1,942
1979	2,380	2,346	2,415
Comparative Estimate as a Percent of the Reference Estimate			
1983	—	101.4	98.7
1982	—	100.2	102.1
1981	—	100.7	101.9
1980	—	99.5	100.8
1979	—	98.6	101.5

<sup>1</sup>From Table 1 in EIA's *Petroleum Supply Annual*, 1981 through 1983 and Table 1 in EIA's *Petroleum Statement, Annual*, 1979 and 1980. This table also includes imports for the Strategic Petroleum Reserve (SPR) which were 85.3 million in 1983, 60.2 million in 1982, 93.3 million in 1981, 16.1 million in 1980, and 24.4 million in 1979.

<sup>2</sup>Estimate equals the sum of the annual estimate of imports derived from API's *Monthly Statistical Report* (which excludes imports for SPR), and the EIA estimates for imports for the SPR which are listed in footnote 1 above. Annual values were obtained by summing monthly values.

<sup>3</sup>Data on imports to Puerto Rico and the Virgin Islands which are included in the source for these estimates have been excluded from these estimates in keeping with the geographic coverage of the table. Data are from the Bureau of the Census, Trade Information Branch, FT-246 Annual, *U.S. Imports for Consumption and General Imports: TSUSA*, and IA-245X Annual, *U.S. Imports for Consumption and General Imports: TSUSA*, 1980 through 1983. Data for 1979 are from computer printouts of the Bureau of the Census Report IM-245X dated December 19, 1980.

<sup>4</sup>Volumes are rounded to the nearest million barrels. One barrel equals 42 U.S. gallons.

Note: Geographic coverage is the 50 United States and the District of Columbia.

Source: Energy Information Administration, *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292, *Petroleum Supply Annual*, DOE/EIA-0340, *Petroleum Statement, Annual*, DOE/EIA-0108; Bureau of the Census, *U.S. Imports for Consumption and General Imports: TSUSA*, FT-246, IA-245, and IM-245X; American Petroleum Institute, *Monthly Statistical Report*.



**Table 3. Comparison of Estimates for Motor Gasoline Supplied for Domestic Use**

		Reference Estimate	Comparative Estimates		
		EIA, <i>Petroleum Supply Annual</i> <sup>1</sup>	EIA, Petroleum Marketing Division <sup>2</sup>	American Petroleum Institute <sup>3</sup>	Federal Highway Administration <sup>4</sup>
Volume (Million Barrels <sup>5</sup> )					
1983	...	2,417	2,495	2,420	2,434
1982	...	2,387	2,451	2,376	2,413
1981	...	2,404	2,431	2,379	2,446
1980	...	2,408	2,573	2,523	2,486
1979	...	2,568	2,749	2,579	2,649
Comparative Estimate as a Percent of the Reference Estimate					
1983	...	—	103.2	100.1	100.7
1982	...	—	102.7	99.5	101.1
1981	...	—	101.1	99.0	101.7
1980	...	—	106.9	104.8	103.2
1979	...	—	107.0	100.4	103.2

<sup>1</sup>Data from Table 2 in EIA's *Petroleum Supply Annual*, 1981 through 1983 and Table 2 in EIA's *Petroleum Statement, Annual*, 1979 and 1980.

<sup>2</sup>Data from the EIA-25, "Prime Suppliers Report" (computer printouts), 1979-1982. Prime supplier usually is the supplier or producer which makes the first sale of any product into the State. In 1983, the EIA-25 was incorporated into the EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption."

<sup>3</sup>API publishes monthly estimates in thousand barrels per month of the volume of motor gasoline delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of motor gasoline.

<sup>4</sup>Data from Federal Highway Administration, *Highway Statistics*, Tables MF-21A and MF-24.

<sup>5</sup>Volumes are rounded to the nearest million barrels. One barrel equals 42 U.S. gallons.

Note Geographic coverage is the 50 United States and the District of Columbia, except where indicated.

Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, *Petroleum Statement, Annual*, DOE/EIA-0108, *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292, EIA-25, "Prime Suppliers Report," EIA-782C "Monthly Report of Petroleum Products Sold into States for Consumption", Federal Highway Administration, *Highway Statistics*; American Petroleum Institute, *Monthly Statistical Report*

cluded expansion of the refinery survey to include non-refinery blenders and the separation of blending components from finished motor gasoline as a reporting category. Also, survey forms were modified to more accurately describe refinery operations. Beginning in 1981, comparisons with three independent statistics show significant improvement in the PSRS motor gasoline data (Table 3). Prior to 1981, differences in estimates ranged as high as 7.0 percent. In 1983, two of the three comparative estimates were within 0.7 percent.

- The EIA's Petroleum Marketing Division surveys "Petroleum Product Sales into States for Consumption," Form EIA-782C. EIA-782C statistics may differ from the PSRS supply statistics by the amount of stock changes in the local distribution systems. The two statistics closed to within 1.1 percent after the PSRS changes in 1981, but have drifted to a 3.2-percent difference in 1983. This may be due to double-counting by the EIA-782C survey or incomplete coverage by the PSRS. The PSRS data on motor gasoline are being studied to check the current coverage of blending operations.
- The API's initial monthly estimates of motor gasoline supply are based on API sources. From 1981 through 1983 API estimates were within 1.0 percent of the PSA data. API surveys a sample of companies for each product for their *Weekly Statistical Report*. These data form the basis for the monthly estimates appearing in API's *Monthly Statistical Report*.

- The Federal Highway Administration publishes statistics on motor fuel use in their annual *Highway Statistics* publication. The Federal Highway Administration's total gasoline use data (with aviation gasoline deducted) were compared with PSRS motor gasoline supplied data. As does the EIA-782C survey, the Federal Highway Administration system measures sales rather than supply. The differences between the series have diminished each year; from 1980 through 1983 the differences decreased from 3.2 percent to 0.7 percent.

### Distillate and Residual Fuel Oil Supplied

In 1981, EIA improved the procedures for calculating distillate fuel oil and residual fuel oil supply statistics. Comparisons of the PSRS statistics with the EIA-782C data (Tables 4 and 5) show that significant improvements in the closeness of the statistics have occurred since 1981 for both distillate fuel oil (including kerosene) and residual fuel oil. In 1983, the difference for distillate fuel oil was 1.7 percent compared with 5.3 percent in 1979. The difference for residual fuel oil was 1.7 percent in 1983, a considerable improvement from 23.4 percent in 1979. Since the PSRS statistics have stayed relatively close to the comparable API statistics, the improvements appear mostly to reflect improvements in the EIA-782C data.

**Table 4. Comparison of Estimates for Distillate Fuel Oil (Including Kerosene) Supplied for Domestic Use**

	Reference Estimate	Comparative Estimates	
	EIA, <i>Petroleum Supply Annual</i> <sup>1</sup>	EIA, Petroleum Marketing Division <sup>2</sup>	American Petroleum Institute <sup>3</sup>
Volume (Million Barrels <sup>4</sup> )			
1983 . . . . .	1,028	1,045	1,027
1982 . . . . .	1,021	1,054	1,031
1981 . . . . .	1,079	1,067	1,109
1980 . . . . .	1,107	1,181	1,141
1979 . . . . .	1,277	1,345	1,291
Comparative Estimate as a Percent of the Reference Estimate			
1983 . . . . .	—	101.7	99.9
1982 . . . . .	—	103.2	101.0
1981 . . . . .	—	98.9	102.8
1980 . . . . .	—	106.7	103.1
1979 . . . . .	—	105.3	101.1

<sup>1</sup>Data from EIA's *Petroleum Supply Annual*, Table 2, 1981 through 1983 and *Petroleum Statement, Annual*, Table 2, 1979 and 1980

<sup>2</sup>Data from the EIA-25, "Prime Suppliers Report" (computer printouts), 1979-1982. Prime supplier usually is the supplier or producer which makes the first sale of any product into the State. In 1983, the EIA-25 was incorporated into the EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption."

<sup>3</sup>API publishes monthly estimates in thousand barrels per month of the volume of distillate and kerosene delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of distillate and kerosene. In 1982, API discontinued publishing kerosene as a separate category; PSA data for kerosene supplied have been added to API distillate totals (47 million barrels in 1982 and 46 million barrels in 1983).

<sup>4</sup>Volumes are rounded to the nearest million barrels. One barrel equals 42 U.S. gallons.

Note: Geographic coverage is the 50 United States and the District of Columbia.

Sources: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, *Petroleum Statement, Annual*, DOE/EIA-0108, *An Assessment of the Accuracy of Principal Data Series of the Energy Information Administration*, DOE/EIA-0292, EIA-25, "Prime Suppliers Report," EIA-782C "Monthly Report of Petroleum Products Sold into States for Consumption"; American Petroleum Institute, *Monthly Statistical Report*.

**Table 5. Comparison of Estimates for Residual Fuel Oil Supplied for Domestic Use**

	Reference Estimate	Comparative Estimates	
	EIA, <i>Petroleum Supply Annual</i> <sup>1</sup>	EIA, Petroleum Marketing Division <sup>2</sup>	American Petroleum Institute <sup>3</sup>
Volume (Million Barrels <sup>4</sup> )			
1983 . . . . .	519	510	525
1982 . . . . .	627	584	622
1981 . . . . .	762	723	780
1980 . . . . .	918	815	937
1979 . . . . .	1,032	791	1,044
Comparative Estimate as a Percent of the Reference Estimate			
1983 . . . . .	—	98.3	101.2
1982 . . . . .	—	93.1	99.2
1981 . . . . .	—	94.9	102.4
1980 . . . . .	—	88.8	102.1
1979 . . . . .	—	76.6	101.2

<sup>1</sup>Data from Table 2 in EIA's *Petroleum Supply Annual*, 1981 through 1983 and Table 2 in EIA's *Petroleum Statement, Annual*, 1979 and 1980.

<sup>2</sup>Data from the EIA-25, "Prime Suppliers Report" (computer printouts), 1979-1982. Prime supplier usually is the supplier or producer which makes the first sale of any product into the State. In 1983, the EIA-25 was incorporated into the EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption."

<sup>3</sup>API publishes monthly estimates in thousand barrels per month of the volume of residual oil delivered from primary storage. The initial published monthly estimate is derived from API sources, but in later API publications the estimates are revised using EIA data. The values shown in the table are equal to the sums of the initial published API monthly estimates of residual oil.

<sup>4</sup>Volumes are rounded to the nearest million barrels. One barrel equals 42 U.S. gallons.

Note: Geographic coverage is the 50 United States and the District of Columbia.

Sources: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340, *Petroleum Statement, Annual*, DOE/EIA-0108, EIA-25, "Prime Suppliers Report," EIA-782C, "Monthly Report of Petroleum Products Sold into States for Consumption"; American Petroleum Institute, *Monthly Statistical Report*.

# An Evaluation of Crude Oil Production Statistics

The Energy Information Administration (EIA) publishes domestic crude oil production data in the *Petroleum Supply Monthly (PSM)* and the *Petroleum Supply Annual (PSA)*, based on data compiled by State agencies and the U.S. Minerals Management Service<sup>1</sup> rather than on EIA survey data.<sup>2</sup> Although EIA surveys crude oil production annually to balance the accounting of petroleum reserves, this does not meet the need to track trends in petroleum supply.<sup>3</sup> The accuracy of EIA's monthly reported crude oil production depends, therefore, upon the accuracy of State and Federal crude oil reporting systems. EIA recently reviewed the rules and processes governing compilation of crude oil and lease condensate production information by 11 States that account for more than 90 percent of domestic crude oil production.<sup>4</sup> EIA also compared production volumes reported in EIA publications with those shown in the States' production reports to assess the accuracy of information flow between State regulatory agencies and EIA. This article presents the findings of that assessment.

## State Reporting Systems

Systematic differences in definitions, rules, and regulations of the different regulatory agencies were found to have little impact on the reported data for most States.

For example, some regulatory bodies require that crude oil and lease condensate be reported separately, while others require them reported combined. EIA deals with these forms of categorization by aggregating crude oil and lease condensate in the *PSM* and the *PSA*.

A second systematic difference occurs because some States require that respondents report the volumes of liquids extracted from the producing formation, while other States have respondents report only the net volume sold and removed from the lease. The volume of petroleum liquids used on the lease for fuel or other purposes or lost through spillage usually does not exceed 1 percent of extracted production, with the exception of California.

In California a thermal enhanced oil recovery technique maximizes the total oil recovered but creates a reporting dissimilarity with other States. This technique for the production of heavy oil uses a substantial portion of the extracted oil produced as fuel to generate steam for the recovery process. While exact data on oil volumes used as fuel in the field are extremely difficult to obtain, available evidence suggests that the amount may be as much as 12 percent of extracted production in California. California producers report production as the volume extracted; therefore, it is important to remember that up to 12 percent of the production reported and published is crude oil that never leaves the lease and is unavailable for processing at refineries. During the next decade, as new petroleum recovery techniques spread, there may be an increasing gap between petroleum reported produced and petroleum available for refining.

## Evaluating the State-to-EIA Information Flow

The quality of EIA's published crude oil and lease condensate production data depends on the timeliness of State reporting and on how EIA utilizes the information. Table 1 presents 1980 through 1983 annual comparisons of preliminary production data supplied by 11 States and published in the *PSM*, revised data published in the *PSA*, and final data published in each State's annual report. The table shows that about half of the major revisions to State data were incorporated in EIA's published annual figures.

The variation between the sum of final data published by EIA and the sum of final data published by the 11 States for 1980 was less than 0.1 percent. Only Kansas had a final EIA-State difference greater than 1 percent for 1980. At that time, States were queried during the summer following the report year allowing them and the U.S. Minerals Management Service time to compile the final crude oil figures used by EIA. Thus, EIA was able to publish State revisions as they became available with an accuracy of within 0.1 percent of the final State data sum. Beginning with the 1981 *PSA*, the publication deadline for annual data was advanced several months. States are now queried during the spring.

The 1981 schedule change for publication of the *PSA* makes the comparison of *PSA* data with final State data particularly important. While not all revisions were received and processed prior to publishing the *PSA*'s for 1981, 1982, and 1983, EIA's comparison suggests that even if no revisions were received and processed, the crude oil production estimates published in the *PSA* are likely to differ from final State data by no more than 2 to 3 percent for a few States. The actual differences between the *PSA* and the final State figures are likely to be less than 1 percent for most States, and differences in total U.S. production should be 0.4 percent or less.

Preliminary and final EIA data for aggregated U.S. production show slightly greater divergence from final State-published data from 1981 through 1983 than the

<sup>1</sup>The U.S. Minerals Management Service, formerly the U.S. Geological Survey, is the source of Federal offshore production information for Texas, Louisiana, and California. Federal offshore production is included in the production of the adjacent State.

<sup>2</sup>The *PSM* publishes a preliminary national estimate of crude oil production prepared by the Dallas Field Office. This article focuses on the individual State figures.

<sup>3</sup>EIA's Reserves and Natural Gas Division surveys natural gas and crude oil well operators and publishes annual reserve and production figures in the U.S. *Crude Oil, Natural Gas, and Natural Gas Liquids Reserves Annual Report*, DOE/EIA-0216. These crude oil production figures are used to maintain a balance in reserve accounting. These figures differ from those shown for production in the *PSA* and other EIA publications.

<sup>4</sup>The States covered in this study are Alaska, California, Colorado, Kansas, Louisiana, Michigan, Mississippi, New Mexico, Oklahoma, Texas, and Wyoming.

**Table 1. Reported Annual Crude Oil Production (Including Lease Condensate) for Selected States**  
(Thousand Barrels, except where noted)

State	Initial EIA Production (PSM)	Final EIA Production (PSA)	Final State Annual Report Production	EIA Adjustments (PSM - PSA) <sup>1</sup>		Difference (PSA - Final State) <sup>2</sup>		Difference (PSM - Final State) <sup>3</sup>	
				Volume	Percent	Volume	Percent	Volume	Percent
1980									
Alaska	591,684	591,646	591,641	38	0.0	5	0.0	43	0.0
California	356,644	356,923	357,109	-279	-0.1	-186	-0.1	-465	-0.1
Colorado	29,565	29,802	29,802	-237	-0.8	0	0.0	-237	-0.8
Kansas	60,152	60,151	58,541	1	0.0	1,610	2.8	1,611	2.8
Louisiana	466,964	469,141	469,141	-2,177	-0.5	0	0.0	-2,177	-0.5
Michigan	32,753	33,808	33,808	-1,055	-3.1	0	0.0	-1,055	-3.1
Mississippi	36,533	35,945	35,945	588	1.6	0	0.0	588	1.6
New Mexico	75,456	75,324	75,324	132	0.2	0	0.0	132	0.2
Oklahoma	151,960	150,140	150,140	1,820	1.2	0	0.0	1,820	1.2
Texas	975,239	977,436	977,436	-2,197	-0.2	0	0.0	-2,197	-0.2
Wyoming	129,309	126,362	126,362	2,947	2.3	0	0.0	2,947	2.3
11-State Sum	2,906,259	2,906,678	2,905,249	-419	-0.0	1,429	0.0	1,010	0.0
U.S. Total	3,146,519	3,146,365	3,145,330	154	0.0	1,035	0.0	1,189	0.0
1981									
Alaska	587,337	587,337	587,339	0	0.0	-2	-0.0	-2	-0.0
California	384,958	384,958	384,992	0	0.0	-34	-0.0	-34	-0.0
Colorado	30,151	30,303	30,409	-152	-0.5	-106	-0.3	-258	-0.9
Kansas	65,810	65,810	65,810	0	0.0	0	0.0	0	0.0
Louisiana	447,156	449,315	451,216	-2,159	-0.5	-1,901	-0.4	-4,060	-0.9
Michigan	32,665	32,665	32,665	0	0.0	0	0.0	0	0.0
Mississippi	34,637	34,204	34,381	433	1.3	-177	-0.5	256	0.7
New Mexico	71,568	71,568	72,155	0	0.0	-587	-0.8	-587	-0.8
Oklahoma	153,287	154,056	154,057	-769	-0.5	-1	-0.0	-770	-0.5
Texas	945,132	945,132	944,684	0	0.0	448	0.0	448	0.0
Wyoming	130,563	130,563	122,174	0	0.0	8,389	6.9	8,389	6.9
11-State Sum	2,883,264	2,885,911	2,879,882	-2,647	-0.1	6,029	0.2	3,382	0.1
U.S. Total	3,122,410	3,128,624	3,123,229	-6,214	-0.2	5,395	0.2	-819	-0.0
1982									
Alaska	618,742	618,910	618,914	-168	-0.0	-4	-0.0	-172	-0.0
California	401,572	401,572	401,387	0	0.0	185	0.0	185	0.0
Colorado	30,582	30,545	30,788	37	0.1	-243	-0.8	-206	-0.7
Kansas	70,525	70,525	70,525	0	0.0	0	0.0	0	0.0
Louisiana	457,913	458,395	458,396	-482	-0.1	-1	-0.0	-483	-0.1
Michigan	31,177	31,462	31,462	-285	-0.9	0	0.0	-285	-0.9
Mississippi	34,080	33,047	33,047	1,033	3.1	0	0.0	1,033	3.1
New Mexico	70,833	71,024	71,024	-191	-0.3	0	0.0	-191	-0.3
Oklahoma	158,621	158,621	158,621	0	0.0	0	0.0	0	0.0
Texas	923,868	925,296	918,987	-1,428	-0.2	6,309	0.7	4,881	0.5
Wyoming	124,371	118,300	118,716	6,071	5.1	-416	-0.4	5,655	4.8
11-State Sum	2,922,284	2,917,697	2,911,867	4,587	0.2	5,830	0.2	10,417	0.4
U.S. Total	3,161,022	3,156,715	3,151,203	4,307	0.1	5,512	0.2	9,819	0.3
1983									
Alaska	625,811	625,527	625,527	284	0.0	0	0.0	284	0.0
California	404,688	404,688	405,317	0	0.0	-629	-0.2	-629	-0.2
Colorado	29,004	29,050	29,026	-46	-0.2	24	0.1	-22	-0.1
Kansas	71,595	71,594	71,594	1	0.0	0	0.0	1	0.0
Louisiana	477,853	479,569	480,977	-1,716	-0.4	-1,408	-0.3	-3,124	-0.7
Michigan	31,386	31,736	32,205	-350	-1.1	-469	-1.5	-819	-2.5
Mississippi	31,243	31,455	31,451	-212	-0.7	4	0.0	-208	-0.7
New Mexico	74,729	75,169	75,169	-440	-0.6	0	0.0	-440	-0.6
Oklahoma	158,972	158,604	158,665	368	0.2	-61	-0.0	307	0.2
Texas	900,737	902,676	904,221	-1,939	-0.2	-1,545	-0.2	-3,484	-0.4
Wyoming	114,067	118,303	121,303	-4,236	-3.6	-3,000	-2.5	-7,236	-6.0
11-State Sum	2,920,085	2,928,371	2,935,455	-8,286	-0.3	-7,084	-0.2	-15,370	-0.5
U.S. Total	3,159,375	3,170,999	3,181,930	-11,624	-0.4	-10,931	-0.3	-22,555	-0.7

<sup>1</sup>The cumulative monthly State production from the *Petroleum Supply Monthly*, Table 11, or the *Monthly Petroleum Statement*, Table 17, minus the volume reported in the *Petroleum Supply Annual*, Table 9.

<sup>2</sup>The *Petroleum Supply Annual* final production volume minus the production published in State annual reports. Percent difference is calculated by dividing the volumetric difference by the final State production.

<sup>3</sup>The cumulative monthly State production published in the *Petroleum Supply Monthly*, Table 11, or the *Monthly Petroleum Statement*, Table 17, minus the production published in State annual reports. Percent difference is calculated by dividing the volumetric difference by the final State production.

Sources: Energy Information Administration, *Petroleum Supply Monthly*, DOE/EIA-0109, *Petroleum Supply Annual*, DOE/EIA-0340, and predecessor reports, and *Evaluation of the Energy Information Administration Crude Oil and Natural Gas Production Reporting Systems*, Service Report, (Washington D.C., December 1982). Published data for individual States reported by State regulatory agencies. Federal offshore crude oil and lease condensate production reported in *Outer Continental Shelf Statistics*, U.S. Department of Interior, Geological Survey, Conservation Division, June 1981, and *Calendar Year Report*, U.S. Department of Interior, Minerals Management Service Office of Offshore Minerals Management.

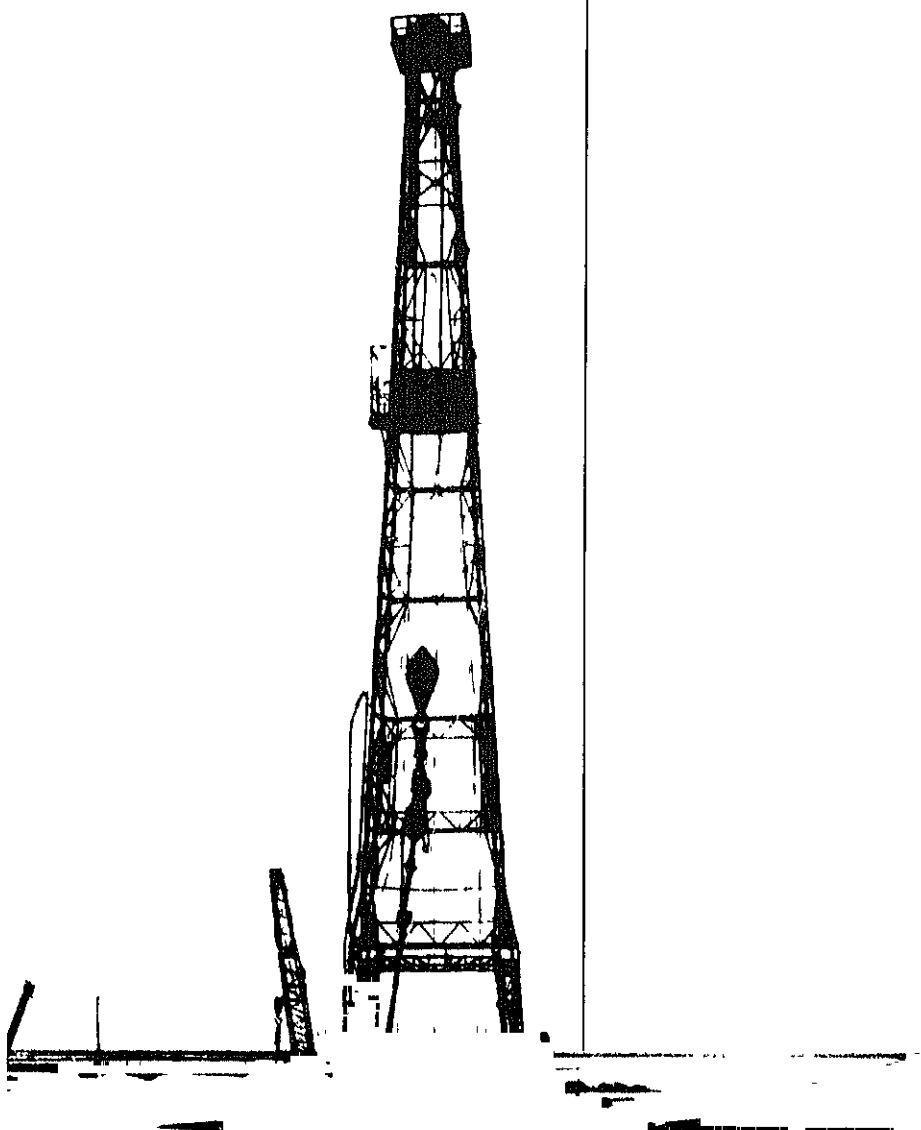
did in 1980. Except for Wyoming and Michigan, less than 1 percent variation exists between final EIA and final State data between 1981 and 1983. Of 33 initial EIA-final State differences, only 5 exceeded 1 percent. In 1981, Wyoming, 6.9 percent; in 1982, Mississippi, 3.1 percent and Wyoming, 4.8 percent; and in 1983, Michigan, -2.5 percent and Wyoming, -6.0 percent. Wyoming is a special case, because the State does not publish monthly numbers. EIA estimates Wyoming's monthly production from the previous year's figures. This tends to result in larger differences in EIA's preliminary esti-

mate and the final State crude oil production figure. Wyoming accounted for the 0.2-percent difference between the final EIA sum of production and the final State sum in 1981.

In summary, EIA's review indicates that its present preliminary production data from State agencies and the U.S. Minerals Management Service, as published, closely approximate final data published by those agencies and can provide a reliable timely estimate of crude oil production at the State level.



# Summary Statistics



# Crude Oil<sup>1</sup> and Petroleum Products Overview

		Field Production			Stock Withdrawal <sup>2</sup>			Ending Stocks <sup>3</sup>
		Total Domestic <sup>4</sup>	Crude Oil	Natural Gas Plant Production	Crude Oil <sup>5</sup>	Petroleum Products	Petroleum Products Supplied	Crude Oil <sup>5</sup> and Petroleum Products
		Thousand Barrels per Day						Million Barrels
1973	Average	10,975	9,208	1,738	11	-146	17,308	1,008
1974	Average	10,498	8,774	1,688	-62	-117	16,653	<sup>B</sup> 1,074
1975	Average	10,045	8,375	1,633	<sup>B</sup> -17	<sup>B</sup> -145	16,322	1,133
1976	Average	9,774	8,132	1,603	-39	96	17,461	1,112
1977	Average	9,913	8,245	1,618	-170	-378	18,431	1,312
1978	Average	10,328	8,707	1,567	-78	172	18,847	1,278
1979	Average	10,179	8,552	1,584	-148	-25	18,513	1,341
1980	Average	10,214	8,597	1,573	-98	-42	17,056	<sup>B</sup> 1,392
1981	Average	10,230	8,572	1,609	<sup>B</sup> -290	<sup>B</sup> 130	16,058	1,484
1982								
	January	10,128	8,509	1,578	-401	1,298	16,124	1,456
	February	10,312	8,702	1,563	-242	1,230	16,001	1,428
	March	10,284	8,667	1,572	121	1,047	15,560	1,392
	April	10,188	8,591	1,542	-37	1,583	16,046	1,346
	May	10,244	8,683	1,518	29	-66	14,847	1,347
	June	10,212	8,646	1,511	40	-489	14,998	1,360
	July	10,229	8,658	1,513	-147	-926	14,821	1,393
	August	10,215	8,634	1,524	-440	-44	14,839	1,408
	September	10,279	8,701	1,518	263	-447	15,022	1,414
	October	10,299	8,701	1,530	-548	-47	14,859	1,432
	November	10,359	8,697	1,609	-398	-361	15,009	1,455
	December	10,276	8,598	1,628	128	688	15,487	<sup>B</sup> 1,430
	Average	10,252	8,649	1,550	-136	283	15,296	
1983								
	January	10,331	8,697	1,580	<sup>B</sup> -499	<sup>B</sup> 772	14,722	1,452
	February	10,388	8,758	1,575	-320	1,113	14,792	1,430
	March	10,279	8,700	1,541	83	1,810	15,541	1,372
	April	10,322	8,776	1,506	-402	308	14,692	1,374
	May	10,190	8,631	1,493	-15	-602	14,505	1,394
	June	10,261	8,667	1,523	-122	-276	15,289	1,405
	July	10,228	8,636	1,539	233	-909	15,019	1,426
	August	10,284	8,679	1,562	-796	-271	15,480	1,460
	September	10,447	8,784	1,602	-239	-621	15,506	1,485
	October	10,434	8,771	1,604	-274	-442	14,962	1,508
	November	10,461	8,770	1,641	114	-182	15,500	1,510
	December	9,983	8,397	1,544	-329	2,133	16,726	1,454
	Average	10,299	8,688	1,559	-214	234	15,231	
1984								
	January	10,282	8,659	1,585	-342	1,085	16,726	1,430
	February	10,410	8,726	1,629	186	-1,353	15,389	1,464
	March	10,354	8,718	1,588	-2	643	16,017	1,444
	April	10,347	8,688	1,616	-565	-128	15,484	1,465
	May	10,415	8,752	1,610	-616	-422	15,566	1,497
	June	10,398	8,743	1,612	-95	-77	15,687	1,502
	July	10,487	8,769	1,649	-184	-184	15,547	1,514
	August	10,476	8,781	1,663	250	185	16,130	1,500
	September*	10,464	8,759	1,666	R 266	R -736	R 15,315	R 1,514
	October**	NA	8,847	NA	-342	-485	15,419	1,534
		NA	8,744	NA	-147	-138	15,732	

increase in stocks and a positive number indicates a decrease.

other hydrocarbons, and alcohol.

in Reserve.

Petroleum Reserve.

respondents were added to surveys affecting stocks

See Explanatory Note 10.

Page 8



# Crude Oil<sup>1</sup> and Petroleum Products Overview (continued)

		Imports			Exports			
		Total	Crude Oil <sup>6</sup>	Petroleum Products	Total	Crude Oil	Petroleum Products	
Thousand Barrels per Day								
1973	Average	6,256	3,244	3,012	231	2	229	6,025
1974	Average	6,112	3,477	2,635	221	3	218	5,892
1975	Average	6,056	4,105	1,951	209	6	204	5,846
1976	Average	7,313	5,287	2,026	223	8	215	7,090
1977	Average	8,807	6,615	2,193	243	50	193	8,565
1978	Average	8,363	6,356	2,008	362	158	204	8,002
1979	Average	8,456	6,519	1,937	472	235	237	7,984
1980	Average	6,909	5,263	1,646	544	287	258	6,365
1981	Average	5,996	4,396	1,599	595	228	367	5,401
1982	January	5,332	3,693	1,639	829	238	591	4,503
	February	4,807	2,990	1,817	804	304	499	4,003
	March	4,484	2,874	1,610	882	321	561	3,602
	April	4,378	2,849	1,529	786	174	611	3,593
	May	4,811	3,309	1,503	803	262	542	4,008
	June	5,327	3,836	1,491	703	94	609	4,624
	July	5,890	4,248	1,642	741	229	512	5,149
	August	5,244	3,851	1,392	858	304	554	4,386
	September	5,414	3,636	1,778	791	184	606	4,624
	October	5,306	3,670	1,636	932	270	662	4,374
	November	5,744	3,862	1,882	786	262	524	4,958
	December	4,606	3,000	1,605	860	193	667	3,746
	Average	5,113	3,488	1,625	815	236	579	4,298
1983	January	4,438	2,964	1,474	973	117	856	3,464
	February	3,726	2,267	1,459	865	262	603	2,861
	March	3,690	2,290	1,400	801	174	627	2,889
	April	4,727	3,118	1,609	809	88	721	3,918
	May	5,089	3,360	1,729	848	280	568	4,241
	June	5,326	3,577	1,749	774	144	630	4,552
	July	5,741	3,871	1,870	571	145	426	5,170
	August	6,159	4,227	1,933	663	172	491	5,496
	September	6,129	4,210	1,919	684	177	507	5,445
	October	5,258	3,446	1,812	576	140	436	4,682
	November	5,210	3,337	1,873	679	186	494	4,531
	December	5,033	3,213	1,820	639	95	544	4,394
	Average	5,051	3,329	1,722	739	164	575	4,312
1984	January	5,347	3,029	2,318	575	153	422	4,772
	February	5,643	2,952	2,691	582	185	397	5,061
	March	5,253	3,455	1,798	840	236	605	4,413
	April	5,319	3,417	1,902	655	172	483	4,664
	May	5,916	3,927	1,989	766	219	548	5,150
	June	5,304	3,410	1,893	864	222	642	4,440
	July	5,387	3,646	1,741	536	108	429	4,851
	August	5,036	3,244	1,793	732	190	542	4,305
	September*	R 5,173	R 3,294	R 1,880	664	162	502	4,510
	October**	5,572	3,731	1,842	NA	NA	NA	NA
	Average	5,395	3,414	1,981	NA	NA	NA	NA

Footnotes continued

\* See Explanatory Note 9.1

\*\* Italics denote estimates based upon preliminary data. See Explanatory Note 8.

R = Revised data. NA = Not available

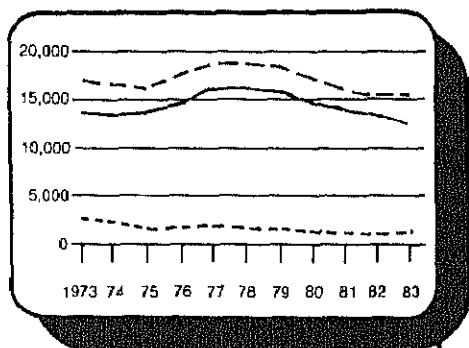
Note: Geographic coverage is the 50 United States and the District of Columbia.

Total may not equal sum of components due to independent rounding.

Source: See the last page of this section.

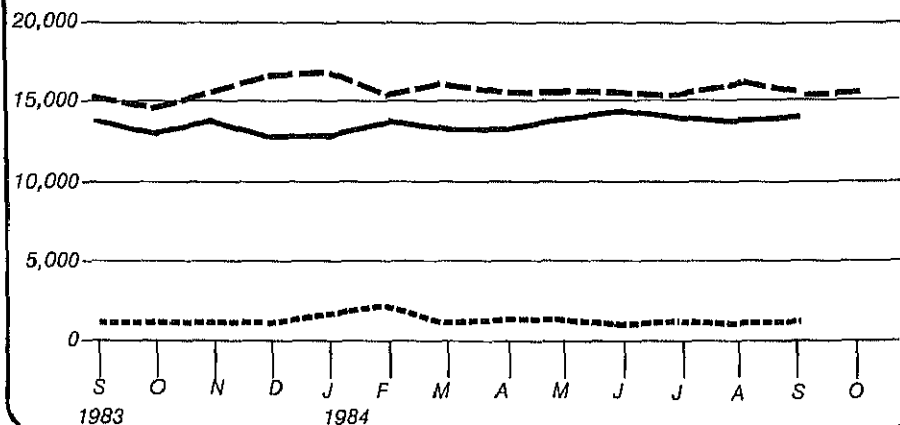
## Petroleum Overview

(Thousand Barrels Per Day)



Annual

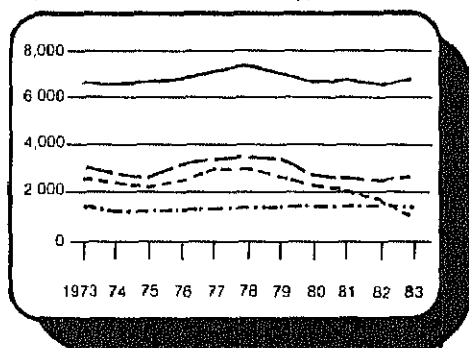
Legend  
 — Petroleum Product Supplied  
 - - - Refinery Production  
 . . . Net Petroleum Product Imports



Monthly

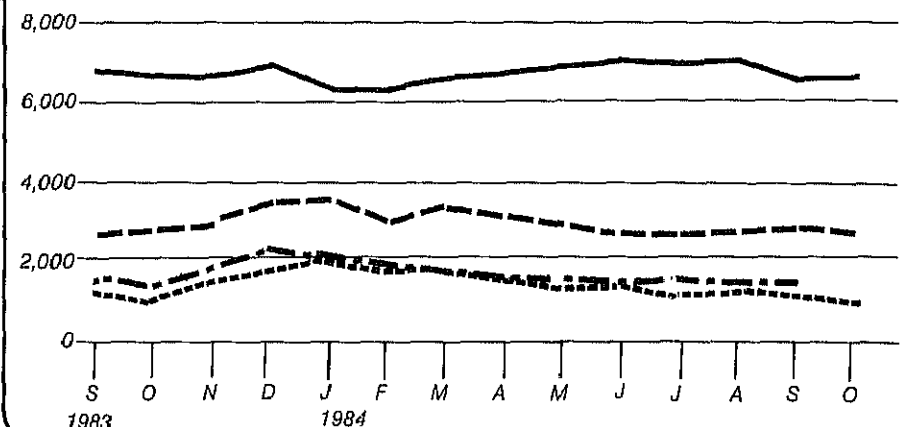
## Petroleum Products Supplied

(Thousand Barrels Per Day)



Annual

Legend  
 — Motor Gasoline  
 - - - Distillate Fuel Oil  
 . . . Residual Fuel Oil  
 - . . LPG<sup>1</sup>

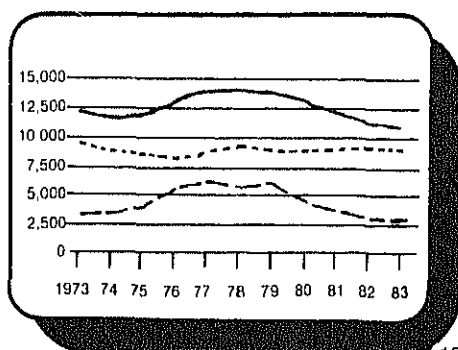


Monthly

<sup>1</sup> Liquefied Petroleum Gases

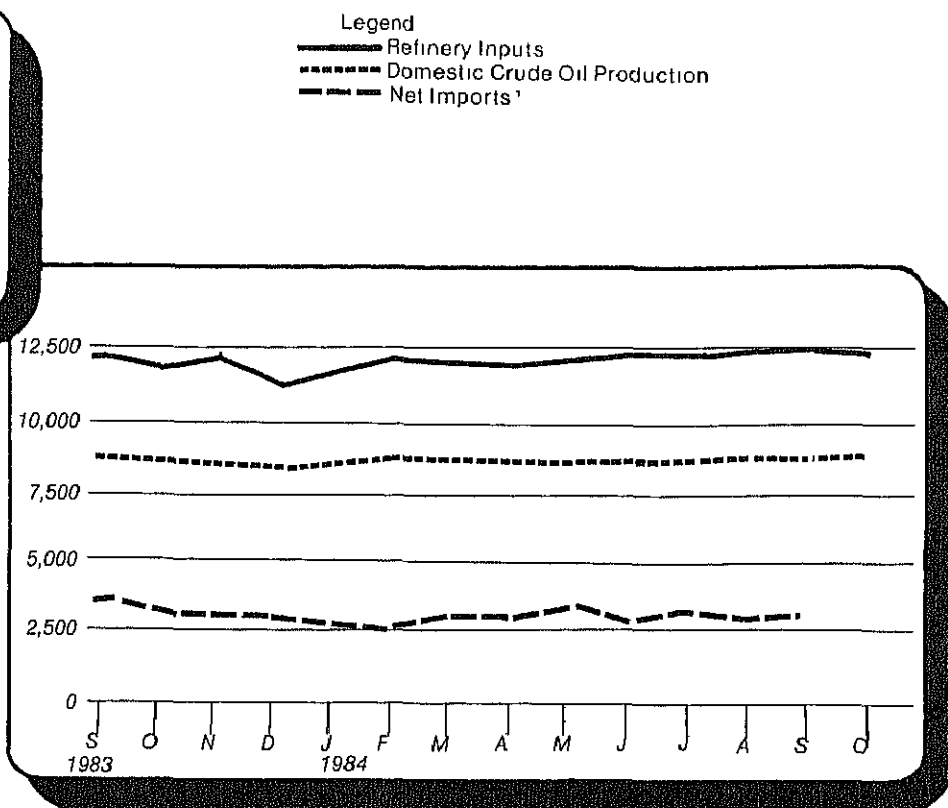
## Crude Oil Supply and Disposition

(Thousand Barrels Per Day)



Annual

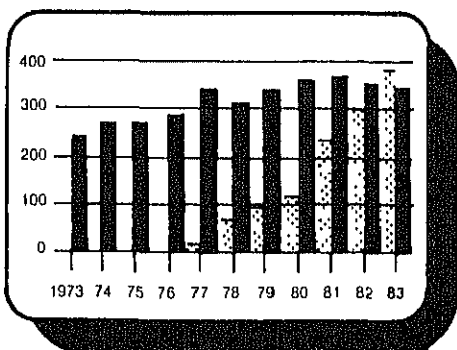
<sup>1</sup> Excludes SPR Imports



Monthly

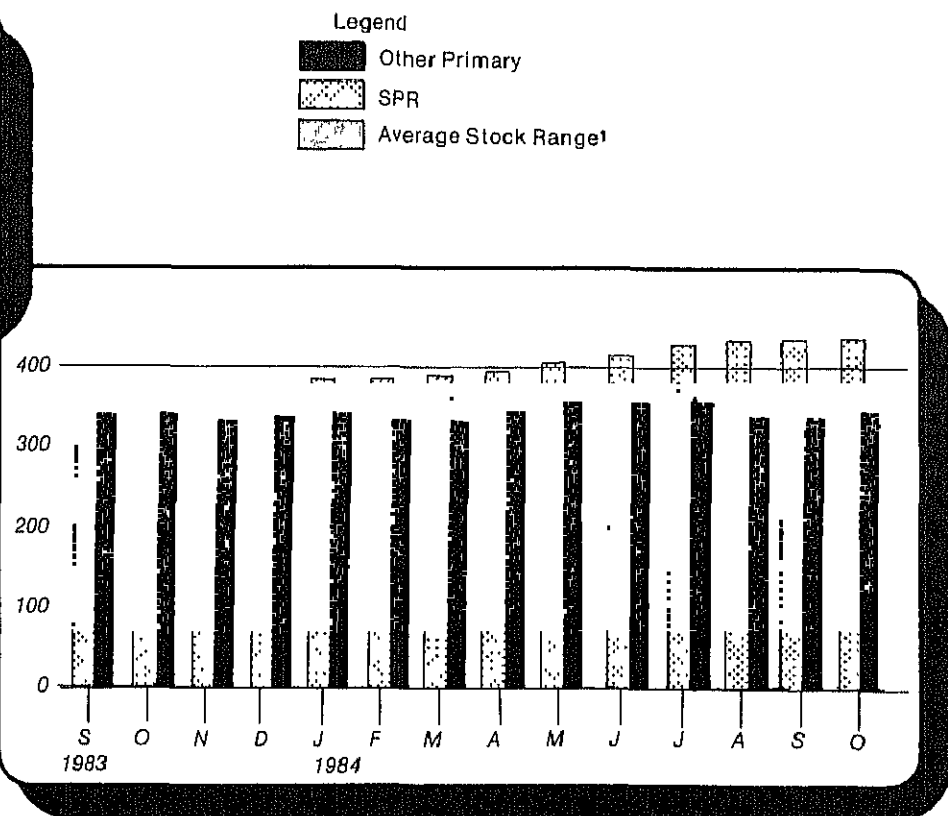
## Crude Oil Ending Stocks

(Million Barrels)



Annual

<sup>1</sup> Level and width of Average Stock range for other primary crude oil based on 3 years of data Jul 81-Jun. 84. See Explanatory Note 6.



Monthly

# Crude Oil<sup>1</sup> Supply and Disposition

		Supply							Unac- counted for Crude Oil
		Field Production		Imports			Stock Withdrawal <sup>3</sup>		
		Total Domestic	Alaskan	Total	SPR <sup>4</sup>	Other	SPR <sup>4</sup>	Other	
1973	Average	9,208	198	3,244		3,244		11	3
1974	Average	8,774	193	3,477		3,477		-62	-25
1975	Average	8,375	191	4,105		4,105		-17	17
1976	Average	8,132	173	5,287		5,287		-39	77
1977	Average	8,245	464	6,615	21	6,594	-20	-150	-6
1978	Average	8,707	1,229	6,356	162	6,195	-163	84	-57
1979	Average	8,552	1,401	6,519	67	6,452	-67	-81	-11
1980	Average	8,597	1,617	5,263	44	5,219	-45	-52	34
1981	Average	8,572	1,609	4,396	256	4,141	-336	<sup>6</sup> 46	83
1982	January	8,509	1,705	3,693	170	3,523	-159	-242	101
	February	8,702	1,707	2,990	159	2,830	-213	-29	156
	March	8,667	1,696	2,874	185	2,689	-235	357	2
	April	8,591	1,691	2,849	190	2,659	-233	196	231
	May	8,683	1,707	3,309	204	3,105	-176	205	111
	June	8,646	1,665	3,836	105	3,732	-105	144	133
	July	8,658	1,710	4,248	97	4,150	-97	-50	-20
	August	8,634	1,697	3,851	208	3,643	-208	-232	189
	September	8,701	1,705	3,636	139	3,497	-143	406	-210
	October	8,701	1,706	3,670	216	3,454	-216	-332	249
	November	8,697	1,676	3,862	180	3,683	-179	-219	-124
	December	8,598	1,682	3,000	124	2,877	-125	252	35
	Average	8,649	1,696	3,488	165	3,323	-174	38	71
1983	January	8,697	1,732	2,964	219	2,746	-219	<sup>6</sup> -280	170
	February	8,758	1,717	2,267	197	2,070	-197	-123	262
	March	8,700	1,732	2,290	201	2,089	-184	267	31
	April	8,776	1,721	3,118	205	2,913	-197	-205	98
	May	8,631	1,662	3,360	289	3,071	-293	278	169
	June	8,667	1,687	3,577	190	3,387	-188	66	370
	July	8,636	1,715	3,871	274	3,597	-264	497	-167
	August	8,679	1,697	4,227	350	3,876	-358	-438	281
	September	8,784	1,738	4,210	309	3,901	-307	68	-30
	October	8,771	1,733	3,446	202	3,244	-201	-73	44
	November	8,770	1,720	3,337	171	3,166	-135	250	34
	December	8,397	1,711	3,213	193	3,020	-252	-78	117
	Average	8,688	1,714	3,329	234	3,096	-234	20	114
1984	January	8,659	1,741	3,029	200	2,829	-173	-169	451
	February	8,726	1,740	2,952	85	2,868	-96	282	487
	March	8,718	1,740	3,455	148	3,307	-147	145	66
	April	8,688	1,725	3,417	170	3,247	-170	-396	590
	May	8,752	1,793	3,927	246	3,681	-245	-371	463
	June	8,743	1,792	3,410	309	3,101	-309	214	490
	July	8,769	1,769	3,646	329	3,317	-328	144	25
	August	8,781	1,725	3,244	180	3,064	-179	429	383
	September*	8,759	1,725	R 3,294	R 53	R 3,240	R -53	R 320	234
	October**	8,847	1,708	3,731	138	3,593	-138	-204	NA
	Average	8,744	1,746	3,414	186	3,227	-184	38	NA

<sup>1</sup> Includes lease condensate

<sup>2</sup> Stocks are totals as of end of period.

<sup>3</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>4</sup> Strategic Petroleum Reserve

<sup>5</sup> Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.

<sup>6</sup> Stocks of Alaskan crude oil in transit were included beginning in January 1981. Stock withdrawals are calculated using new basis stock levels. See Explanatory Notes 10 and 11.

Footnotes continued on following page.

Crude Oil<sup>1</sup> Supply and Disposition (continued)

		Supply	Disposition				Ending Stocks <sup>2</sup>		
		Crude Used Directly <sup>5</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied <sup>6</sup>	Total Crude Oil	SPR <sup>4</sup>	Other Primary
		Thousand Barrels per Day					Million Barrels		
1973	Average	-19	13	12,431	2	NA	242		242
1974	Average	-15	13	12,133	3	NA	265		265
1975	Average	-17	13	12,442	6	NA	271		271
1976	Average	-18	15	13,416	8	NA	285		285
1977	Average	-14	16	14,602	50	NA	348	7	340
1978	Average	-14	16	14,739	158	NA	376	67	309
1979	Average	-13	16	14,648	235	NA	430	91	339
1980	Average	-13	15	13,481	287	NA	<sup>6</sup> 466	108	<sup>6</sup> 358
1981	Average	-58	5	12,470	228	NA	594	230	363
1982	January	-63	3	11,599	238	NA	606	235	371
	February	-64	2	11,236	304	NA	613	241	372
	March	-63	5	11,276	321	NA	609	249	361
	April	-65	3	11,392	174	NA	610	256	355
	May	-62	3	11,806	262	NA	609	261	348
	June	-60	7	12,494	94	NA	608	264	344
	July	-60	3	12,446	229	NA	613	267	346
	August	-57	2	11,871	304	NA	626	274	353
	September	-56	4	12,146	184	NA	619	278	341
	October	-51	2	11,749	270	NA	636	285	351
	November	-51	1	11,724	262	NA	648	290	358
	December	-53	1	11,514	193	NA	<sup>6</sup> 644	294	350
	Average	-59	3	11,774	236	NA			
1983	January	NA	2	11,143	117	71	660	301	360
	February	NA	3	10,633	262	71	669	306	363
	March	NA	2	10,859	174	70	667	312	355
	April	NA	2	11,433	88	68	679	318	361
	May	NA	1	11,800	280	63	679	327	353
	June	NA	( <sup>s</sup> )	12,284	144	64	683	332	351
	July	NA	2	12,360	145	65	676	341	335
	August	NA	1	12,152	172	64	700	352	349
	September	NA	1	12,482	177	66	708	361	347
	October	NA	1	11,782	140	63	716	367	349
	November	NA	2	12,004	186	64	713	371	341
	December	NA	1	11,234	95	67	723	379	344
	Average	NA	2	11,685	164	66			
1984	January	NA	1	11,579	153	64	733	384	348
	February	NA	1	12,100	185	65	727	387	340
	March	NA	2	11,936	236	62	728	392	336
	April	NA	( <sup>s</sup> )	11,893	172	64	744	397	348
	May	NA	2	12,243	219	62	764	404	359
	June	NA	2	12,263	222	61	766	414	353
	July	NA	1	12,087	108	60	772	424	348
	August	NA	1	12,403	190	63	764	429	335
	September*	NA	-2	12,327	162	66	R 756	R 431	R 325
	October**	NA	NA	12,219	NA	NA	773	436	337
	Average	NA	NA	12,105	NA	NA			

Footnotes continued.

\* See Explanatory Note 9.2

\*\* Italics denote estimates based upon preliminary data. See Explanatory Note 8.

R = Revised data. NA = Not available. (s) = Less than 500 barrels per day.

Note. Geographic coverage is the 50 United States and the District of Columbia.

Total may not equal sum of components due to independent rounding.

Source: See the last page of this section.

# Crude Oil and Petroleum Product Imports

		Imports from OPEC Sources <sup>1</sup>									
		Algeria	Libya	Saudi Arabia	United Arab Emirates	Indonesia	Iran	Nigeria	Venezuela	Other OPEC <sup>2</sup>	Total Arab OPEC <sup>3</sup>
		Thousand Barrels per Day									
1973	Average	136	164	486	71	213	223	459	1,135	106	2,993
1974	Average	190	4	461	74	300	469	713	979	88	3,280
1975	Average	282	232	715	117	390	280	762	702	122	3,601
1976	Average	432	453	1,230	254	539	298	1,025	700	134	5,066
1977	Average	559	723	1,380	335	541	535	1,143	690	287	6,193
1978	Average	649	654	1,144	385	573	555	919	645	226	5,751
1979	Average	636	658	1,356	281	420	304	1,080	690	212	5,637
1980	Average	488	554	1,261	172	348	9	857	481	130	4,300
1981	Average	311	319	1,129	81	366	0	620	406	90	3,323
1982	January	254	161	877	111	289	0	663	376	128	2,859
	February	139	92	693	89	244	0	584	355	102	2,297
	March	91	37	555	155	200	0	522	399	91	2,051
	April	85	0	511	122	215	0	427	426	85	1,871
	May	179	0	601	116	236	0	222	422	54	1,830
	June	115	0	593	94	215	72	537	361	110	2,096
	July	159	0	660	108	327	69	910	356	95	2,685
	August	181	0	489	133	271	27	574	299	133	2,107
	September	179	0	432	57	191	21	477	518	69	1,943
	October	249	7	494	61	242	108	313	504	106	2,084
	November	247	14	489	47	283	34	479	528	115	2,235
	December	155	0	237	12	265	88	462	399	73	1,690
	Average	170	26	552	92	248	35	514	412	97	2,146
1983	January	207	0	282	47	255	43	186	337	54	1,412
	February	115	0	214	9	217	0	92	393	28	1,068
	March	63	0	103	0	138	0	121	440	201	1,066
	April	227	0	162	(9)	210	0	186	523	125	1,432
	May	286	0	122	12	405	37	385	455	69	1,771
	June	300	0	188	40	466	38	467	335	138	1,973
	July	283	0	182	64	464	112	525	434	187	2,251
	August	378	0	448	52	433	213	464	511	230	2,728
	September	423	0	587	21	501	86	324	432	221	2,595
	October	261	0	638	16	368	12	307	337	169	2,108
	November	184	0	545	56	302	21	215	452	135	1,910
	December	144	0	569	45	294	9	329	415	163	1,969
	Average	240	0	337	30	338	48	302	422	144	1,862
1984	January	242	0	463	114	278	0	243	547	51	1,939
	February	348	0	324	33	267	0	244	481	174	1,871
	March	283	0	307	112	284	67	260	354	127	1,792
	April	280	0	320	95	221	0	288	581	158	1,944
	May	456	0	329	240	480	0	289	621	242	2,657
	June	284	0	411	46	415	0	243	574	139	2,112
	July	332	0	429	112	384	0	204	535	242	2,237
	August	404	0	438	82	281	0	114	487	216	2,021
	September	343	0	159	113	333	17	160	689	147	1,961
	Average	330	0	354	106	327	9	227	541	166	2,061

<sup>1</sup> Excludes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

<sup>2</sup> Includes Ecuador, Gabon, Iraq, Kuwait, and Qatar.

<sup>3</sup> Includes Algeria, Libya, Saudi Arabia, United Arab Emirates, Iraq, Kuwait, and Qatar.  
Footnotes continued on following page.

# Crude Oil and Petroleum Product Imports ( continued )

		Imports from Non-OPEC Sources <sup>4</sup>										
		Baha- mas	Canada	Mexico	Nether- lands Antilles	Trinidad and Tobago	United Kingdom	Puerto Rico	Virgin Islands	Other Non OPEC	Total Non OPEC	Total Imports
		Thousand Barrels per Day										
1973	Average	174	1,325	16	585	255	15	99	329	465	3,263	6,256
1974	Average	164	1,070	8	511	251	8	90	391	340	2,832	6,112
1975	Average	152	846	71	332	242	14	90	406	300	2,454	6,056
1976	Average	118	599	87	275	274	31	88	422	353	2,247	7,313
1977	Average	171	517	179	211	289	126	105	466	550	2,614	8,807
1978	Average	160	467	318	229	253	180	94	429	484	2,613	8,363
1979	Average	147	538	439	231	190	202	92	431	548	2,819	8,456
1980	Average	78	455	533	225	176	176	88	388	491	2,609	6,909
1981	Average	74	447	522	197	133	375	62	327	534	2,672	5,996
1982	January	58	513	425	179	106	346	62	334	452	2,474	5,332
	February	67	537	476	221	120	181	38	362	508	2,510	4,807
	March	43	437	503	189	118	294	62	307	480	2,433	4,484
	April	82	360	476	184	166	247	36	286	690	2,507	4,387
	May	77	419	766	152	95	516	47	302	607	2,981	4,811
	June	32	481	797	148	129	557	58	322	708	3,231	5,327
	July	64	536	783	158	118	433	38	376	698	3,204	5,890
	August	80	443	853	145	106	520	24	317	650	3,137	5,244
	September	92	493	897	195	89	631	51	278	746	3,472	5,414
	October	45	459	682	148	109	666	52	262	801	3,222	5,306
	November	51	553	860	212	90	623	81	334	706	3,508	5,744
	December	88	561	689	174	102	438	48	336	480	2,916	4,806
	Average	65	482	685	175	112	456	50	316	627	2,968	5,113
1983	January	68	534	849	228	73	314	40	299	621	3,026	4,438
	February	92	586	722	183	81	193	50	192	558	2,658	3,726
	March	86	488	775	187	78	240	43	162	565	2,624	3,690
	April	174	454	981	216	85	421	20	183	759	3,295	4,727
	May	135	518	944	153	108	484	42	235	699	3,318	5,089
	June	137	586	830	173	120	440	48	262	757	3,353	5,326
	July	69	634	849	198	107	369	37	364	864	3,490	5,741
	August	144	542	906	197	90	461	40	313	738	3,431	6,159
	September	148	533	849	261	82	475	33	307	845	3,534	6,129
	October	171	532	771	172	106	414	48	357	580	3,151	5,258
	November	148	556	726	144	110	334	55	427	801	3,300	5,210
	December	127	604	710	153	113	429	22	278	628	3,063	5,033
	Average	125	547	826	189	96	382	40	282	701	3,189	5,051
1984	January	152	624	705	277	54	382	53	390	772	3,408	5,347
	February	142	620	747	288	77	338	58	418	1,083	3,772	5,643
	March	88	726	707	169	93	400	34	247	996	3,460	5,253
	April	88	691	859	207	91	282	37	257	863	3,375	5,319
	May	31	715	675	192	57	418	38	336	796	3,259	5,916
	June	50	499	732	234	104	318	53	268	934	3,192	5,304
	July	14	574	738	99	120	362	27	292	924	3,150	5,387
	August	57	551	621	205	98	388	34	236	826	3,015	5,036
	September	101	537	762	133	103	490	38	245	803	3,213	5,173
	Average	80	616	727	200	89	376	41	298	887	3,313	5,375

Footnotes continued

<sup>4</sup> Includes petroleum imported into the United States indirectly from OPEC countries, primarily from Caribbean and West European areas, as refined petroleum products which were refined from crude oil produced in OPEC countries.

(<sup>a</sup>) = Less than 500 barrels per day.

Note: Beginning in October 1977, Strategic Petroleum Reserve imports are included.

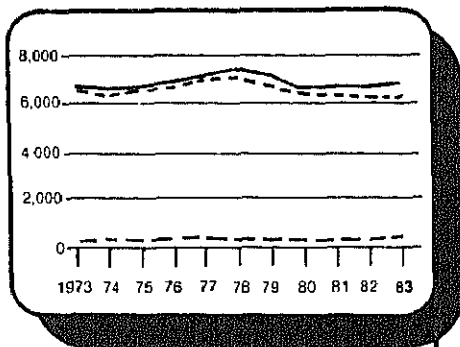
Total may not equal sum of components due to independent rounding.

Geographic coverage: The 50 United States and the District of Columbia.

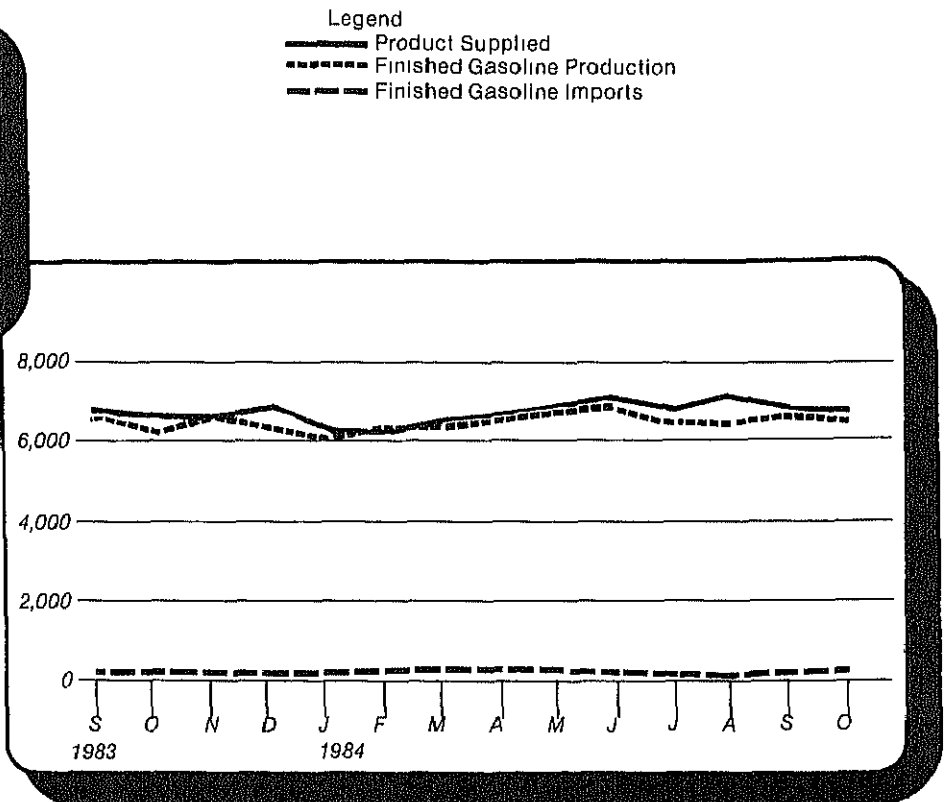
Source: See the last page of this section.

## Motor Gasoline Supply and Disposition

(Thousand Barrels Per Day)



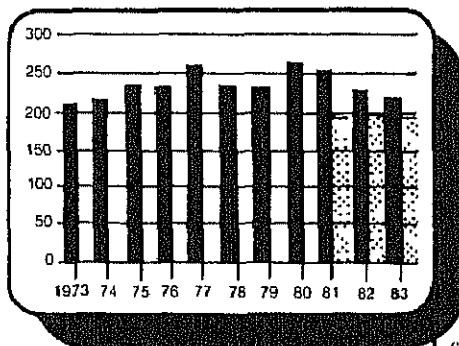
Annual



Monthly

## Motor Gasoline Ending Stocks

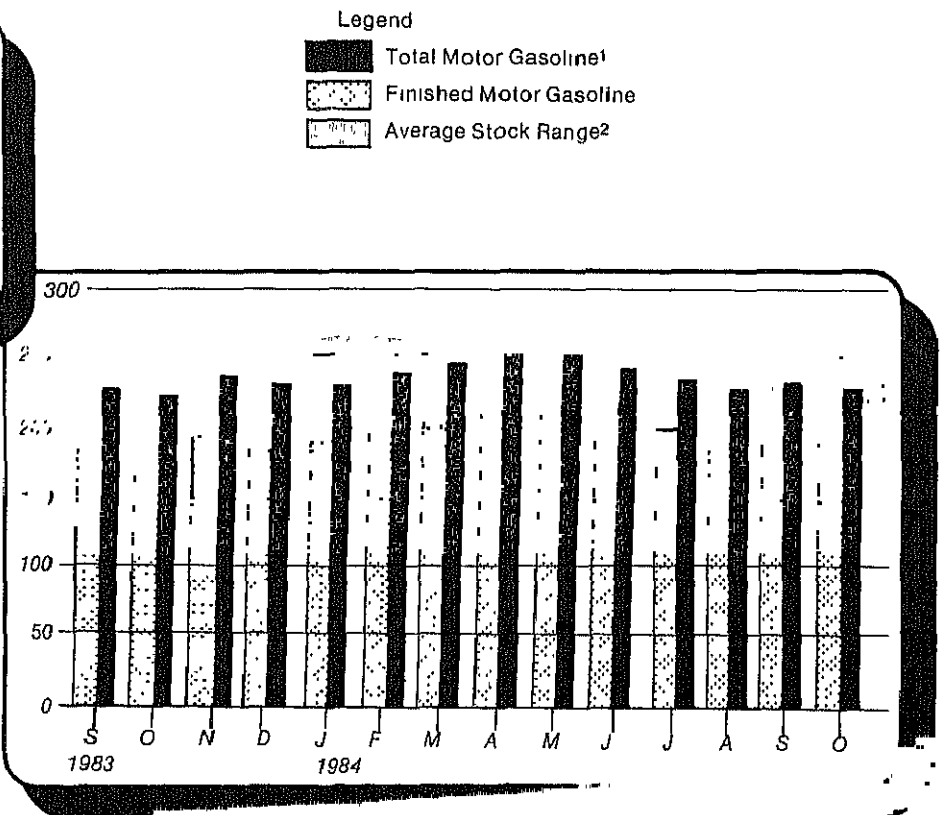
(Million Barrels)



Annual

<sup>1</sup> Includes motor gasoline blending components and finished motor gasoline.

<sup>2</sup> Level and width of Average Stock Range for total motor gasoline based on 3 years of data. Jul. 81-Jun. 84 See Explanatory Note 6.



Monthly



# Finished Motor Gasoline Supply and Disposition

		Supply			Disposition				Ending Stocks <sup>1</sup>	
		Total Production	Imports <sup>2</sup>	Stock With- drawal <sup>2 3</sup>	Exports	Products Supplied			Total Motor Gasoline <sup>5</sup>	Finished Motor Gasoline
						Total	Unleaded <sup>4</sup>	Unleaded		
Thousand Barrels per Day								Percent of Total	Million Barrels	
1973	Average	6,535	134	9	4	6,674	NA	NA	209	
1974	Average	6,360	204	-24	2	6,537	NA	NA	<sup>6</sup> 218	
1975	Average	6,520	184	<sup>6</sup> -28	2	6,675	NA	NA	235	
1976	Average	6,841	131	10	3	6,978	NA	NA	231	
1977	Average	7,033	217	-72	2	7,177	1,976	27.5	258	
1978	Average	7,169	190	54	1	7,412	2,521	34.0	238	
1979	Average	6,852	181	2	0	7,034	2,798	39.8	237	
1980	Average	6,506	140	-66	1	6,579	3,067	46.6	<sup>6</sup> 261	
1981	Average <sup>7</sup>	6,405	157	<sup>6</sup> 28	2	6,588	3,264	49.5	253	
1982	January	6,167	128	-316	18	5,961	3,067	51.5	261	213
	February	5,899	133	172	8	6,196	3,210	51.8	257	208
	March	5,994	183	334	44	6,466	3,358	51.9	247	198
	April	6,095	185	650	33	6,897	3,495	50.7	221	179
	May	6,319	182	177	23	6,655	3,415	51.3	214	173
	June	6,754	230	-134	14	6,835	3,565	52.2	219	177
	July	6,768	225	-178	24	6,790	3,577	52.7	226	183
	August	6,419	291	-81	16	6,614	3,526	53.3	227	185
	September	6,527	223	-198	22	6,531	3,404	52.1	234	191
	October	6,262	185	-42	15	6,391	3,351	52.4	234	192
	November	6,273	211	101	11	6,574	3,451	52.5	230	189
	December	6,542	178	-165	7	6,549	3,485	53.2	<sup>6</sup> 235	<sup>6</sup> 194
	Average	6,338	197	25	20	6,539	3,409	52.1		
1983	January	6,065	153	<sup>6</sup> -167	0	6,051	3,364	55.6	250	207
	February	5,848	128	24	0	6,000	3,264	54.4	250	207
	March	5,906	186	768	23	6,836	3,622	53.0	223	183
	April	6,201	255	-3	1	6,452	3,492	54.1	221	183
	May	6,397	305	-83	1	6,617	3,558	53.8	223	185
	June	6,655	277	84	22	6,994	3,792	54.2	223	183
	July	6,707	302	-225	18	6,765	3,746	55.4	231	190
	August	6,537	250	161	13	6,936	3,836	55.3	226	185
	September	6,611	279	-149	14	6,727	3,691	54.9	229	189
	October	6,188	330	72	2	6,588	3,711	56.3	227	187
	November	6,634	269	-298	2	6,603	3,692	55.9	236	196
	December	6,308	224	339	25	6,846	3,966	57.9	222	186
	Average	6,340	247	45	10	6,622	3,647	55.1		
1984	January	6,037	233	-1	1	6,268	3,606	57.5	225	186
	February	6,320	303	-384	2	6,237	3,585	57.5	237	197
	March	6,375	343	-197	9	6,512	3,747	57.5	243	203
	April	6,528	308	-153	0	6,682	3,854	57.7	248	207
	May	6,650	329	-106	0	6,873	3,990	58.1	253	211
	June	6,620	272	217	17	7,092	4,210	59.4	245	204
	July	6,481	247	130	9	6,849	4,094	59.8	239	200
	August	6,436	243	437	1	7,114	4,263	59.9	225	187
	September*	R 6,545	R 333	R -263	2	R 6,614	3,982	60.2	R 235	R 194
	October**	6,414	325	-47	NA	6,688	NA	NA	230	192
	Average	6,440	293	-34	NA	6,895	NA	NA		

<sup>1</sup> Stocks are totals as of end of period.

<sup>2</sup> Beginning in 1981, excludes blending components.

<sup>3</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>4</sup> Includes gasohol.

<sup>5</sup> Includes motor gasoline blending components.

<sup>6</sup> In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

<sup>7</sup> Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

\* See Explanatory Note 9.3.

\*\* Italics denote estimates based upon preliminary data. See Explanatory Note 8.

R = Revised data. NA = Not available. (s) = Less than 500 barrels per day.

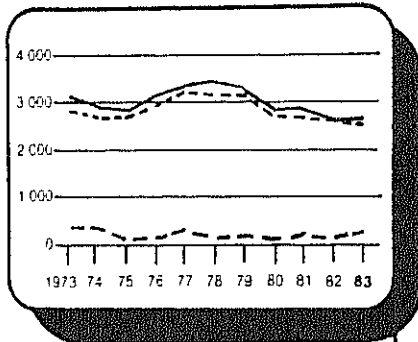
Note: Geographic coverage is the 50 United States and the District of Columbia.

Total may not equal sum of components due to independent rounding.

Source: See the last page of this section.

## Distillate Fuel Oil Supply and Disposition

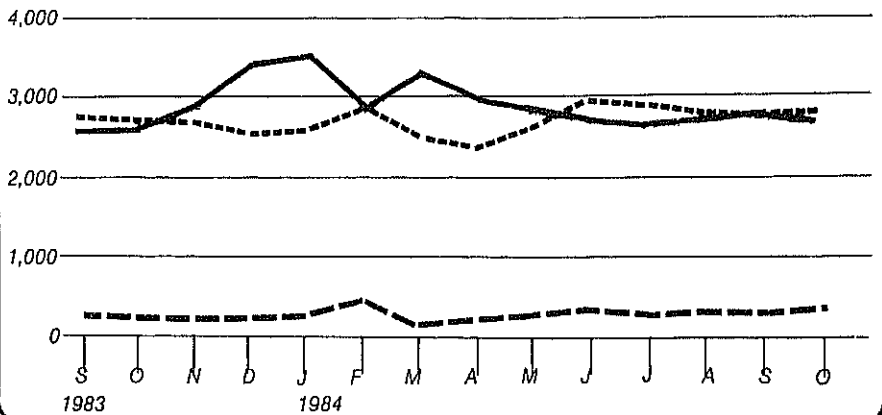
(Thousand Barrels Per Day)



Annual

Legend

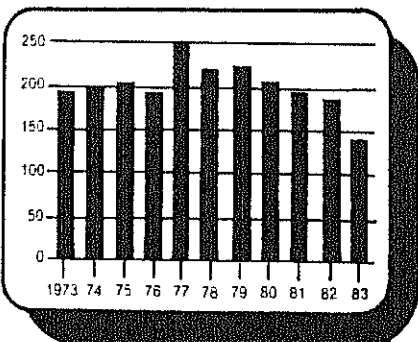
- Product Supplied
- Total Production
- Imports



Monthly

## Distillate Fuel Oil Ending Stocks

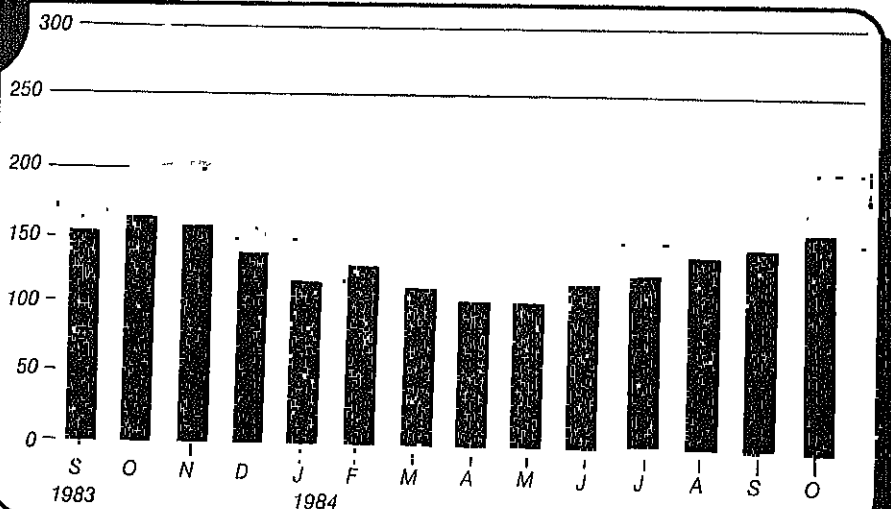
(Million Barrels)



Annual

Legend

- Average Stock Range<sup>1</sup>



Monthly

<sup>1</sup> Level and width of Average Stock Range for distillate fuel oil is based on 3 years on data Jul 81-Jun 84. See Explanatory Note 6

# Distillate Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks <sup>1</sup>
		Total Production	Imports	Stock Withdrawal <sup>2</sup>	Crude Used Directly <sup>3</sup>	Exports	Products Supplied <sup>3</sup>	
		Thousand Barrels per Day						Million Barrels
1973	Average	2,822	392	-115	2	9	3,092	196
1974	Average	2,669	289	-9	2	2	2,948	<sup>4</sup> 200
1975	Average	2,654	155	<sup>4</sup> 40	2	1	2,851	209
1976	Average	2,924	146	62	1	1	3,133	186
1977	Average	3,278	250	-176	1	1	3,352	250
1978	Average	3,167	173	93	1	3	3,432	216
1979	Average	3,153	193	-34	1	3	3,311	229
1980	Average	2,662	142	64	1	3	2,866	<sup>4</sup> 205
1981	Average <sup>5</sup>	2,613	173	<sup>4</sup> 38	10	5	2,829	192
1982	January	2,606	97	876	10	90	3,484	164
	February	2,427	132	605	11	90	3,085	147
	March	2,288	48	682	10	84	2,945	126
	April	2,358	59	612	13	64	2,978	108
	May	2,618	74	-183	10	75	2,444	114
	June	2,729	102	-335	10	55	2,452	124
	July	2,734	125	-789	11	24	2,058	148
	August	2,507	80	-339	10	40	2,218	159
	September	2,657	61	-85	12	139	2,507	161
	October	2,838	91	-289	8	66	2,581	170
	November	2,860	145	-514	8	24	2,475	186
	December	2,655	109	225	10	143	2,855	<sup>4</sup> 179
	Average	2,606	93	35	10	74	2,671	
1983	January	2,321	68	<sup>4</sup> 580	NA	173	2,797	168
	February	2,135	59	691	NA	105	2,780	148
	March	1,993	42	971	NA	59	2,947	118
	April	2,171	73	500	NA	47	2,697	103
	May	2,444	147	-186	NA	50	2,354	109
	June	2,546	179	-161	NA	40	2,524	114
	July	2,604	267	-546	NA	55	2,270	131
	August	2,615	301	-379	NA	43	2,495	142
	September	2,739	259	-386	NA	37	2,575	154
	October	2,681	260	-276	NA	55	2,611	163
	November	2,680	203	45	NA	54	2,874	161
	December	2,522	221	676	NA	54	3,365	140
	Average	2,456	174	124	NA	64	2,690	
1984	January	2,585	270	676	NA	40	3,490	119
	February	2,864	458	-439	NA	41	2,842	132
	March	2,480	115	727	NA	66	3,256	110
	April	2,347	220	393	NA	32	2,929	98
	May	2,633	252	-10	NA	48	2,827	98
	June	2,879	266	-490	NA	53	2,602	113
	July	2,736	198	-375	NA	40	2,518	125
	August	2,678	263	-291	NA	74	2,575	134
	September*	R 2,724	R 285	R -322	NA	22	R 2,665	R 143
	October**	2,739	350	-405	NA	NA	2,621	155
	Average	2,665	267	-50	NA	NA	2,833	

<sup>1</sup> Stocks are totals as of end of period

<sup>2</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease

<sup>3</sup> Beginning in January 1983, product supplied for distillate fuel oil does not include crude oil used directly. See Explanatory Note 4

<sup>4</sup> In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

<sup>5</sup> Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

\* See Explanatory Note 9.4.

\*\* Italics denote estimates based upon preliminary data. See Explanatory Note 8

R = Revised data, NA = Not available, (°) = Less than 500 barrels per day.

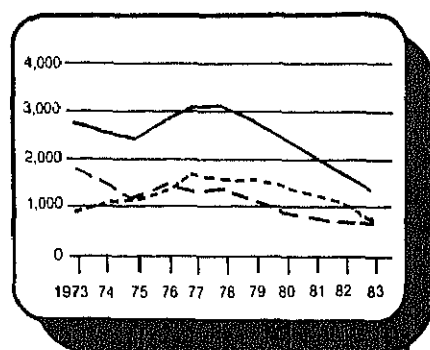
Note: Geographic coverage is the 50 United States and the District of Columbia.

Total may not equal sum of components due to independent rounding.

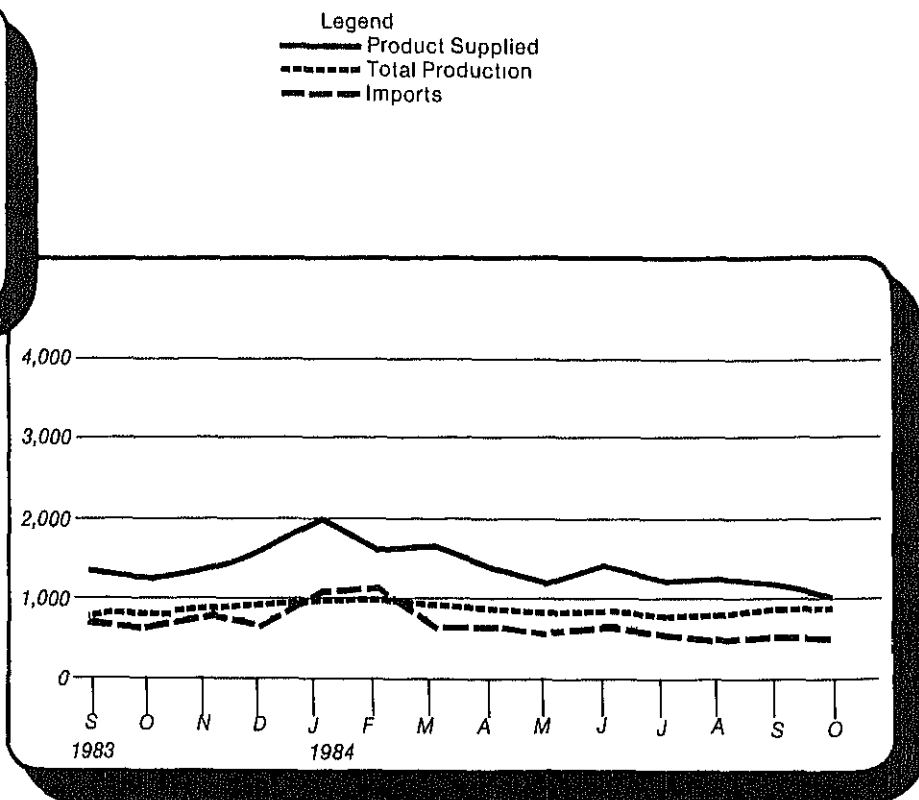
Source: See the last page of this section

## Residual Fuel Oil Supply and Disposition

(Thousand Barrels Per Day)



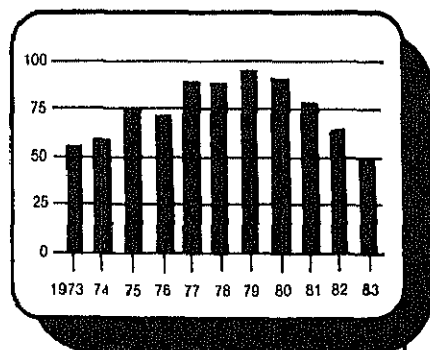
Annual



Monthly

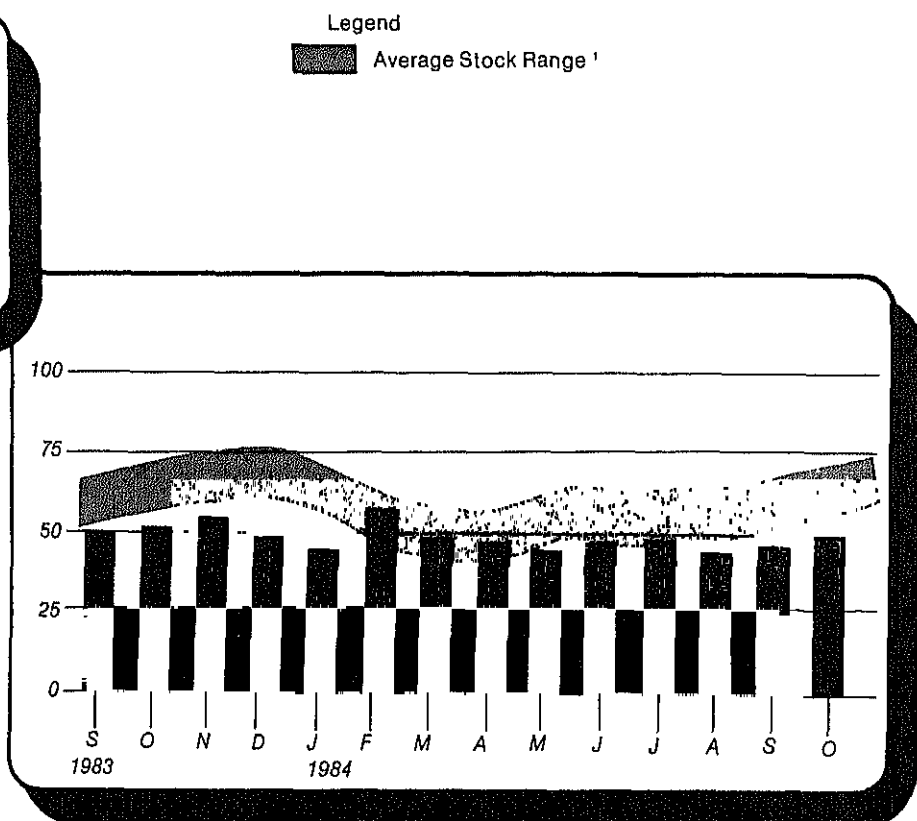
## Residual Fuel Oil Ending Stocks

(Million Barrels)



Annual

<sup>1</sup> Level and width of Average Stock Range for residual fuel oil based on 3 years of data. Jul. 81-Jun. 84. See Explanatory Note 6.



Monthly

# Residual Fuel Oil Supply and Disposition

		Supply				Disposition		Ending Stocks <sup>1</sup>
		Total Production	Imports	Stock Withdrawal <sup>2</sup>	Crude Used Directly <sup>3</sup>	Exports	Products Supplied <sup>3</sup>	
		Thousand Barrels per Day						Million Barrels
1973	Average	971	1,853	5	17	23	2,822	53
1974	Average	1,070	1,587	-17	13	14	2,639	<sup>4</sup> 60
1975	Average	1,235	1,223	<sup>4</sup> 2	15	15	2,462	74
1976	Average	1,377	1,413	5	17	12	2,801	72
1977	Average	1,754	1,359	-48	13	6	3,071	90
1978	Average	1,667	1,355	-1	13	13	3,023	90
1979	Average	1,687	1,151	-15	12	9	2,826	96
1980	Average	1,580	939	10	12	33	2,508	<sup>4</sup> 92
1981	Average <sup>5</sup>	1,321	800	<sup>4</sup> 37	48	118	2,088	78
1982	January	1,235	831	301	53	235	2,185	69
	February	1,186	956	363	53	213	2,344	58
	March	1,123	912	12	53	197	1,903	58
	April	1,166	788	150	52	234	1,923	54
	May	1,128	742	-172	52	191	1,560	59
	June	1,074	652	-57	50	217	1,501	61
	July	1,028	657	56	49	239	1,550	59
	August	965	551	203	47	235	1,531	53
	September	1,008	872	-306	44	148	1,470	62
	October	955	783	-57	43	234	1,490	64
	November	989	837	-94	43	182	1,591	66
	December	989	747	6	43	186	1,598	<sup>4</sup> 66
	Average	1,070	776	32	48	209	1,716	
1983	January	972	691	<sup>4</sup> 258	NA	294	1,626	61
	February	857	647	257	NA	191	1,570	53
	March	835	686	227	NA	169	1,579	46
	April	941	753	-10	NA	310	1,374	47
	May	936	738	-141	NA	190	1,342	51
	June	828	677	36	NA	218	1,323	50
	July	769	684	-64	NA	90	1,299	52
	August	710	739	115	NA	165	1,400	48
	September	826	706	-47	NA	134	1,351	50
	October	807	638	-50	NA	153	1,243	51
	November	845	780	-97	NA	167	1,362	54
	December	897	649	182	NA	141	1,587	49
	Average	852	699	55	NA	185	1,421	
1984	January	953	1,061	119	NA	151	1,981	45
	February	1,003	1,107	-420	NA	87	1,602	58
	March	887	633	321	NA	204	1,637	48
	April	840	637	9	NA	130	1,357	47
	May	829	554	35	NA	200	1,218	46
	June	841	676	-17	NA	176	1,324	47
	July	792	596	-77	NA	99	1,213	49
	August	808	572	146	NA	260	1,266	45
	September*	R 861	R 596	R -77	NA	214	R 1,165	R 47
	October**	863	533	-174	NA	NA	1,019	50
	Average	867	694	-11	NA	NA	1,378	

<sup>1</sup> Stocks are totals as of end of period

<sup>2</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>3</sup> Beginning in January 1983, product supplied for residual fuel oil does not include crude oil used directly. See Explanatory Note 4.

<sup>4</sup> In January 1975, 1981, and 1983, numerous respondents were added to surveys affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

<sup>5</sup> Beginning in January 1981, survey forms were modified. See Explanatory Note 12.

\* See Explanatory Note 9.4.

\*\* Italics denote estimates based upon preliminary data. See Explanatory Note 8.

R = Revised data. NA = Not available. (s) = Less than 500 barrels per day.

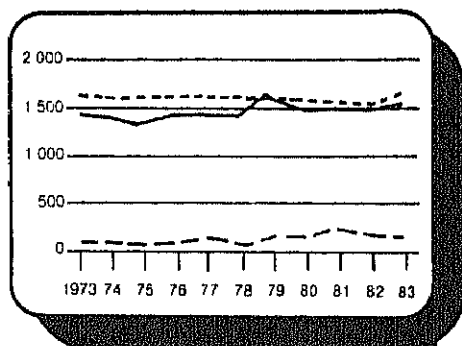
Note: Geographic coverage is the 50 United States and the District of Columbia.

Total may not equal sum of components due to independent rounding.

Source: See the last page of this section.

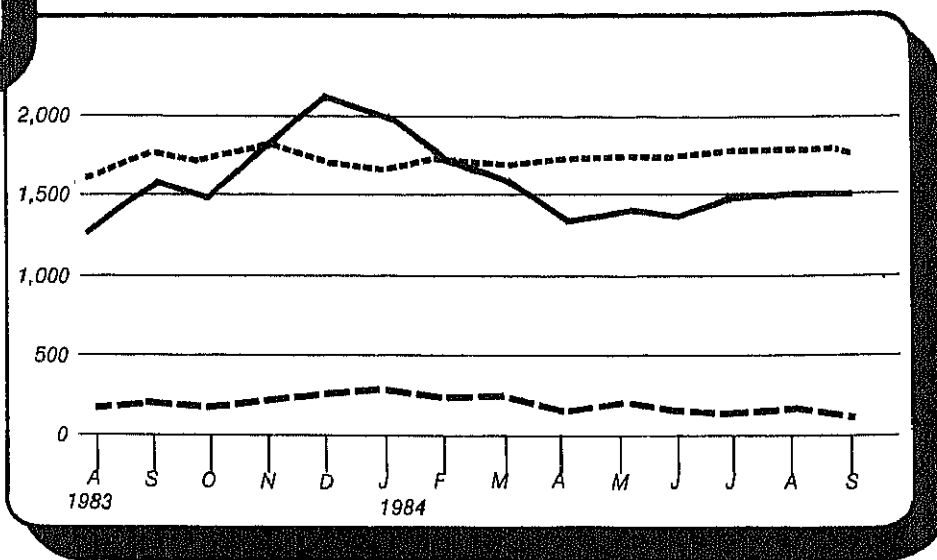
## Liquefied Petroleum Gases Supply and Disposition

(Thousand Barrels Per Day)



Annual

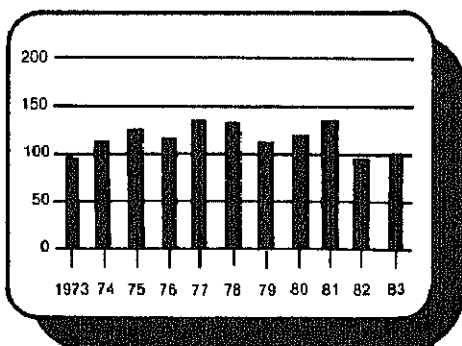
Legend  
 — Product Supplied  
 - - - Total Production  
 . . . Imports



Monthly

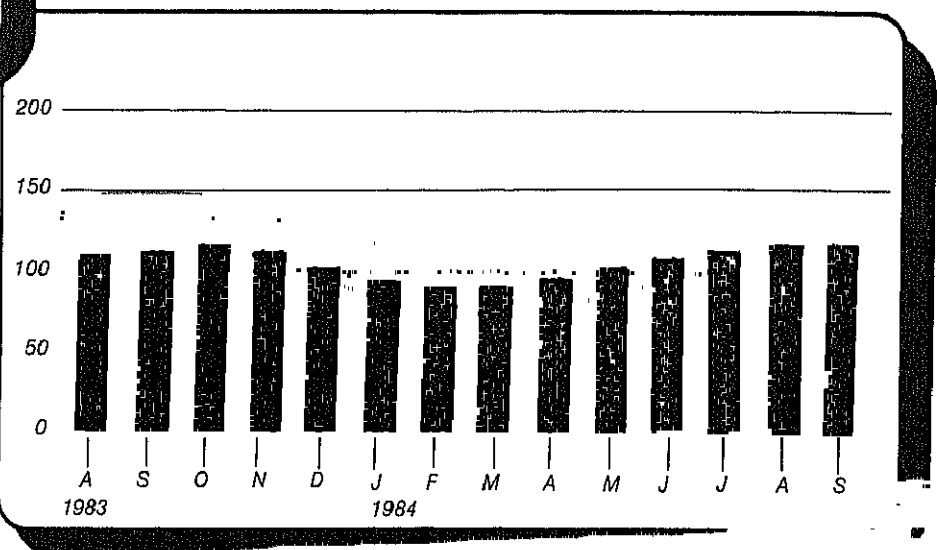
## Liquefied Petroleum Gases Ending Stocks

(Million Barrels)



Annual

Legend  
 ■ Average Stock Range<sup>1</sup>



Monthly

<sup>1</sup> Level and width of Average Stock Ranges for liquefied petroleum gas based on 3 years of data Jul 81-Jun. 84. See Explanatory Note 6.

# Liquefied Petroleum Gases<sup>1</sup> Supply and Disposition

		Supply			Disposition			Ending Stocks <sup>2</sup>
		Total Production	Imports	Stock Withdrawal <sup>3</sup>	Refinery Inputs	Exports	Products Supplied	
		Thousand Barrels per Day						Million Barrels
1973	Average	1,600	132	-35	220	27	1,449	99
1974	Average	1,565	123	-38	220	25	1,406	<sup>4</sup> 113
1975	Average	1,527	112	<sup>4</sup> -35	246	26	1,333	125
1976	Average	1,535	130	24	260	25	1,404	116
1977	Average	1,566	161	-55	233	18	1,422	136
1978	Average	1,537	123	12	239	20	1,413	132
1979	Average	1,556	217	70	236	15	1,592	111
1980	Average	1,535	216	-27	233	21	1,469	<sup>4</sup> 120
1981	Average	1,571	244	<sup>4</sup> -18	289	42	1,466	135
1982	January	1,565	314	443	391	67	1,863	121
	February	1,466	291	243	327	51	1,621	114
	March	1,544	223	211	289	74	1,615	108
	April	1,506	188	98	257	77	1,458	105
	May	1,565	186	-71	234	43	1,403	107
	June	1,515	192	-86	262	106	1,254	109
	July	1,476	227	-13	253	37	1,399	110
	August	1,511	125	-45	254	61	1,276	111
	September	1,538	247	37	274	85	1,463	110
	October	1,517	194	97	306	81	1,421	107
	November	1,542	267	175	363	37	1,583	102
	December	1,580	258	256	395	56	1,642	<sup>4</sup> 94
	Average	1,528	226	111	300	65	1,499	
1983	January	1,611	240	<sup>4</sup> 520	313	118	1,939	86
	February	1,600	305	128	244	76	1,713	82
	March	1,543	166	-9	197	127	1,377	82
	April	1,607	124	-156	198	116	1,260	87
	May	1,613	167	-225	207	84	1,263	94
	June	1,664	172	-334	203	59	1,241	104
	July	1,656	191	-221	217	55	1,354	111
	August	1,586	160	-199	229	29	1,289	117
	September	1,705	178	-30	236	86	1,531	118
	October	1,688	160	-81	266	32	1,467	120
	November	1,785	180	70	362	33	1,640	118
	December	1,645	247	575	363	66	2,038	<sup>4</sup> 101
	Average	1,642	190	4	253	73	1,509	
1984	January	1,610	269	<sup>4</sup> 470	333	23	1,993	93
	February	1,690	237	146	323	41	1,708	89
	March	1,685	241	12	289	68	1,581	89
	April	1,711	155	-170	253	54	1,389	94
	May	1,709	211	-221	244	42	1,412	101
	June	1,714	158	-189	237	53	1,394	106
	July	1,750	132	-138	232	43	1,469	111
	August	1,744	154	-132	241	34	1,491	115
	September*	1,704	128	-24	283	26	1,499	115
	Average	1,702	187	-27	270	43	1,549	

<sup>1</sup> Includes ethane, propane, normal butane, and isobutane.

Beginning in January 1984, unfractionated stream is reported by individual product.

<sup>2</sup> Stocks are totals as of end of period.

<sup>3</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease.

<sup>4</sup> In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10.

\* See Explanatory Note 9.5.

Note: Geographic coverage is the 50 United States and the District of Columbia.

Total may not equal sum of components due to independent rounding.

Source: See the last page of this section.

# Other Petroleum Products<sup>1</sup> Supply and Disposition

		Supply			Disposition			Ending Stocks <sup>2</sup>
		Total Production	Imports	Stock Withdrawal <sup>3</sup>	Refinery Inputs	Exports	Products Supplied	
		Thousand Barrels per Day						Million Barrels
1973	Average	3,693	502	-9	750	166	3,270	208
1974	Average	3,558	432	-28	665	174	3,123	<sup>4</sup> 218
1975	Average	3,424	277	<sup>4</sup> -2	537	160	3,002	219
1976	Average	3,643	206	-5	524	175	3,145	220
1977	Average	3,912	205	-27	514	165	3,410	230
1978	Average	4,046	166	14	492	167	3,568	225
1979	Average	4,153	195	-37	352	209	3,749	238
1980	Average	3,956	210	-23	311	198	3,634	<sup>4</sup> 247
1981	Average	3,739	226	<sup>4</sup> 46	723	199	3,088	282
1982	January	3,171	269	-7	624	180	2,631	282
	February	3,403	305	-153	663	138	2,755	287
	March	3,466	243	-191	725	161	2,631	293
	April	3,408	309	73	796	204	2,790	290
	May	3,317	318	184	824	210	2,785	285
	June	3,547	315	123	812	216	2,954	281
	July	3,660	408	-1	856	187	3,023	281
	August	3,583	346	217	743	202	3,201	274
	September	3,533	375	105	749	213	3,051	271
	October	3,529	383	244	915	266	2,976	264
	November	3,498	423	-28	837	269	2,786	264
	December	3,324	313	366	885	275	2,842	<sup>4</sup> 253
	Average	3,453	334	80	787	211	2,869	
1983	January	3,194	322	<sup>4</sup> -419	588	271	2,239	271
	February	3,229	321	12	673	232	2,658	270
	March	3,381	319	-147	572	249	2,732	275
	April	3,299	404	-24	592	247	2,840	276
	May	3,405	374	35	705	242	2,866	275
	June	3,610	444	96	717	292	3,144	272
	July	3,636	425	148	735	209	3,265	267
	August	3,695	482	30	668	242	3,297	266
	September	3,792	497	-6	788	236	3,255	266
	October	3,578	424	-107	711	195	2,990	270
	November	3,568	441	95	912	238	2,957	267
	December	3,123	479	361	883	257	2,823	<sup>4</sup> 256
	Average	3,460	411	6	712	242	2,923	
1984	January	3,391	486	<sup>4</sup> -177	561	207	2,931	253
	February	3,582	586	-256	751	225	2,935	261
	March	3,510	466	-218	530	258	2,969	268
	April	3,584	582	-207	627	268	3,063	274
	May	3,683	642	-118	775	257	3,175	277
	June	3,863	521	404	1,229	343	3,213	265
	July	3,866	567	278	1,034	238	3,438	257
	August	3,855	561	24	648	172	3,621	256
	September*	3,768	539	-51	712	238	3,306	258
	Average	3,678	550	-35	762	245	3,185	

<sup>1</sup> Includes pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases

<sup>2</sup> Stocks are totals as of end of period.

<sup>3</sup> A negative number indicates an increase in stocks and a positive number indicates a decrease

<sup>4</sup> In January 1975, 1981, 1983, and 1984, a new stock basis was established affecting stocks reported and stock withdrawal calculations. See Explanatory Note 10

\* See Explanatory Note 9 6

Note: Geographic coverage is the 50 United States and the District of Columbia.

Total may not equal sum of components due to independent rounding.

Source: See the last page of this section.



# Sources

1. 1973 through 1976: U.S. Department of the Interior, Bureau of Mines, Mineral Industry Surveys, *Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*.
2. 1977 through 1980: Energy Information Administration (EIA), *Energy Data Reports, Petroleum Statement, Annual* and *PAD Districts Supply/Demand, Annual*, and unleaded gasoline data from *Monthly Petroleum Statistics Report*.
3. January 1981 through December 1983: EIA, *Petroleum Supply Annual*.
4. January 1984 through September 1984. Detailed statistics in appropriate issues of the *Petroleum Supply Monthly*. (See Explanatory Notes 9.1 through 9.6).
5. October 1984: Estimates based on EIA weekly data (except domestic crude oil production) (see Explanatory Note 1.1).
6. January 1984 through October 1984: Domestic crude oil production estimate based on historical statistics from State Conservation Agencies and the U.S. Geological Survey. (See Explanatory Note 3).







Table 1. U.S. Petroleum Balance, September 1984

	Current Month		Year-to date	
	Thousand Barrels	Thousand Barrels per Day	Thousand Barrels	Thousand Barrels per Day
<b>Crude Oil (Including Lease Condensate)</b>				
<b>Field Production</b>				
(1) Alaska	E 51,750	1,725	E 479,522	1,750
(2) Lower 48 States	E 211,017	7,034	E 1,913,250	6,983
(3) Total U S	E 262,767	8,759	E 2,392,772	8,733
<b>Net Imports</b>				
(4) Imports (Gross Excluding SPR)	97,203	3,240	872,970	3,186
(5) SPR Imports	1,599	53	52,584	192
(6) Exports	4,846	162	50,065	183
(7) Imports (Net Including SPR)	93,951	3,132	875,489	3,195
<b>Other Sources</b>				
(8) SPR Withdrawal (+) or Addition (-)	-1,602	-53	-51,980	-190
(9) Other Stock Withdrawal (+) or Addition (-)	9,588	320	17,845	65
(10) Product Supplied and Losses	-1,920	-64	-17,554	-64
(11) Unaccounted for 1	7,018	234	96,537	362
(12) Total Other Sources	13,082	436	44,848	164
(13) Crude Input to Refineries	369,810	12,327	3,313,109	12,092
(13) = (3) + (7) + (12)				
<b>Natural Gas Plant Liquids (NGPL)</b>				
(14) Field Production	49,977	1,668	445,030	1,624
(15) Net Imports 2	1,914	64	11,603	42
(16) Stock Withdrawal (+) or Addition (-) 2	733	24	-1,050	-4
(17) Total NGPL Supply	52,624	1,754	455,583	1,663
<b>Other Liquids</b>				
<b>Unfinished Oils and Gasoline Blending Components, Total</b>				
(18) Stock Withdrawal (+) or Addition (-)	-4,118	-137	-4,216	-15
(19) Imports	9,207	307	84,386	308
(20) Other Hydrocarbons and Alcohol New Supply (Field Production)	1,188	40	12,788	47
(21) Refinery Processing Gain 1	17,235	575	151,262	552
(22) Crude Oil Product Supplied	1,993	66	17,284	63
(23) Total Other Liquids	25,503	850	261,524	954
(23) = (18) through (22)				
(24) Total Production of Products 3	447,937	14,931	4,030,216	14,709
(24) = (13) + (17) + (23)				
<b>Net Imports of Refined Products 3</b>				
(25) Imports (Gross)	45,273	1,509	450,480	1,644
(26) Exports	15,069	502	138,598	508
(27) Imports (Net)	30,204	1,007	311,883	1,138
(28) Total New Supply of Products	478,141	15,938	4,342,078	15,847
(28) = (24) + (27)				
(29) Refined Products Stock Withdrawal (+) or Addition (-) 3	-18,703	-623	-21,681	-79
(30) Total Petroleum Products Supplied for Domestic Use	459,438	15,315	4,320,398	15,768
(30) = (28) + (29)				
(31) Finished Motor Gasoline	198,405	6,614	1,834,592	6,696
(32) Distillate Fuel Oil	79,944	2,665	782,950	2,857
(33) Residual Fuel Oil	34,964	1,165	388,566	1,418
(34) Liquefied Petroleum Gases	44,868	1,499	424,292	1,549
(35) Other 4	99,168	3,305	872,713	3,185
(36) Crude Oil	1,993	66	17,284	63
(37) Total Product Supplied	459,438	15,315	4,320,398	15,768
(37) = (31) through (36)				
<b>Ending Stocks, All Oils</b>				
(38) Crude Oil and Lease Condensate (Excluding SPR)	325,331	--	325,331	--
(39) Strategic Petroleum Reserve (SPR)	431,069	--	431,069	--
(40) Unfinished Oils	108,471	--	108,471	--
(41) Gasoline Blending Components 5	40,765	--	40,765	--
(42) Pentanes Plus	9,815	--	9,815	--
(43) Finished Refined Products 3	598,731	--	598,731	--
(44) Total Stocks	1,514,182	--	1,514,182	--

1 A balancing item.

2 Includes products in the pentanes plus category only.

3 For products included see Explanatory Note 9.7

4 Includes pentanes plus, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil and liquefied petroleum gases

5 Includes other hydrocarbons and alcohol.

E = Estimated.

-- Not Applicable

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures See Explanatory Notes 1, 2 and 9.7.

Table 2. Supply and Disposition of Crude Oil and Petroleum Products, September 1984  
(Thousand Barrels)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
<b>Crude Oil (including lease condensate)</b>	E 262,767	0	98,807	7,986	7,016	-73	369,810	4,846	1,993	756,400
<b>Natural Gas Liquids and LRGs</b>	49,863	10,545	5,746	20	0	0	15,864	787	49,524	125,106
Pentanes Plus	9,283	0	1,915	733	0	0	7,373	1	4,557	9,815
Liquefied Petroleum Gases	40,580	10,545	3,832	-713	0	0	8,491	786	44,966	115,291
Ethane	15,634	592	553	454	0	0	52	2	17,179	20,318
Propane	15,947	8,479	1,722	-1,835	0	0	98	614	23,600	64,080
Normal Butane	5,991	1,499	938	570	0	0	4,557	170	4,272	21,562
Isobutane	3,008	-25	619	98	0	0	3,784	1	-84	9,331
<b>Other Liquids</b>	1,186	0	9,207	-4,118	0	0	13,987	0	-7,712	149,236
Other Hydrocarbons and Alcohol	1,186	0	0	-6	0	0	1,180	0	0	334
Unfinished Oils	0	0	6,630	-2,415	0	0	9,989	0	-5,774	108,471
Motor Gasoline Blending Components	0	0	2,576	-1,592	0	0	2,922	0	-1,938	40,115
Aviation Gasoline Blending Components	0	0	0	-105	0	0	-104	0	-1	316
<b>Finished Petroleum Products</b>	114	496,351	41,441	-17,990	0	0	0	14,282	415,634	483,440
Finished Motor Gasoline	1	196,345	9,988	-7,880	0	0	0	48	198,405	194,460
Finished Leaded Motor Gasoline	1	76,268	4,840	-2,112	0	0	0	48	78,948	87,914
Finished Unleaded Motor Gasoline	0	120,077	5,148	-5,768	0	0	0	0	119,457	106,546
Finished Aviation Gasoline	0	703	61	-16	0	0	0	0	748	2,419
Naphtha-Type Jet Fuel	0	6,852	0	44	0	0	0	0	6,896	7,016
Kerosene-Type Jet Fuel	0	27,989	903	374	0	0	0	27	29,239	38,208
Kerosene	1	3,734	208	-502	0	0	0	6	3,434	8,989
Distillate Fuel Oil	47	81,683	8,543	-8,674	0	0	0	655	79,944	143,214
Residual Fuel Oil	0	25,827	17,866	-2,299	0	0	0	6,430	34,964	46,971
Naphtha < 400 Deg. for Petro. Feed Use	0	3,388	1,297	27	0	0	0	111	4,602	1,850
Other Oils > 400 Deg. for Petro. Feed Use	0	5,326	0	143	0	0	0	646	4,823	1,609
Special Naphthas	0	1,734	1,083	-227	0	0	0	34	2,557	2,841
Lubricants	0	5,266	376	-276	0	0	0	370	4,996	12,520
Waxes	0	509	73	-56	0	0	0	37	488	609
Petroleum Coke	0	13,300	0	-188	0	0	0	5,884	7,228	4,957
Asphalt and Road Oil	0	15,471	1,001	2,445	0	0	0	4	18,912	15,903
Still Gas	0	16,919	0	0	0	0	0	0	16,919	0
Miscellaneous Products	65	1,305	43	95	0	0	0	30	1,479	1,874
<b>Total</b>	313,930	416,896	155,201	-14,102	7,016	-73	399,661	19,915	459,438	1,514,182

<sup>1</sup> Unaccounted for crude oil is a balancing item  
(s) = Less than 500 barrels.  
E = Estimated

Note: Total may not equal sum of components due to independent rounding  
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 3. Year-to-Date Supply and Disposition of Crude Oil and Petroleum Products, January - September 1984  
(Thousand Barrels)

Commodity	Supply					Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 2,392,772	0	925,554	-34,135	96,537	270	3,313,109	50,065	17,284	756,400
Natural Gas Liquids and LRGs	443,603	102,806	63,552	-8,584	0	0	129,829	12,337	459,211	125,106
Pentanes Plus	80,095	0	12,252	-1,050	0	0	55,729	649	34,919	9,815
Liquefied Petroleum Gases	363,508	102,806	51,300	-7,534	0	0	74,100	11,688	424,292	115,291
Ethane	138,630	6,254	20,158	1,061	0	0	566	1,299	164,238	20,318
Propane	142,540	76,668	16,618	-8,600	0	0	1,034	6,921	219,271	64,080
Normal Butane	55,432	19,879	8,775	-1,173	0	0	39,923	2,818	40,172	21,562
Isobutane	26,906	-195	5,748	1,378	0	0	32,577	649	611	9,331
Other Liquids	12,788	0	84,386	-4,216	0	0	153,087	0	-60,129	149,236
Other Hydrocarbons and Alcohol	12,788	0	0	-49	0	0	12,739	0	0	334
Unfinished Oils	0	0	63,970	-973	0	0	110,276	0	-47,279	108,471
Motor Gasoline Blending Components	0	0	20,411	-3,195	0	0	30,074	0	-12,858	40,115
Aviation Gasoline Blending Components	0	0	6	1	0	0	-2	0	9	316
Finished Petroleum Products	1,427	3,644,501	399,160	-14,147	0	0	0	126,909	3,904,032	483,440
Finished Motor Gasoline	498	1,764,907	79,416	-8,965	0	0	0	1,263	1,834,592	194,460
Finished Leaded Motor Gasoline	330	716,594	36,729	6,170	0	0	0	1,263	758,559	87,914
Finished Unleaded Motor Gasoline	168	1,048,313	42,687	-15,135	0	0	0	0	1,076,033	106,546
Finished Aviation Gasoline	0	5,952	596	-128	0	0	0	0	7,420	2,419
Naphtha-Type Jet Fuel	0	57,938	4,182	-803	0	0	0	200	61,117	7,016
Kerosene-Type Jet Fuel	0	250,340	13,091	-5,840	0	0	0	1,154	256,437	38,208
Kerosene	9	29,147	2,180	-1,129	0	0	0	29	30,178	8,989
Distillate Fuel Oil	366	727,661	70,474	-2,812	0	0	0	12,738	782,950	143,214
Residual Fuel Oil	0	237,642	195,256	2,137	0	0	0	46,468	388,566	46,971
Naphtha < 400 Deg. for Petro. Feed. Use	0	34,954	8,926	-138	0	0	0	1,732	42,010	1,850
Other Oils > 400 Deg. for Petro Feed. Use	0	69,539	0	148	0	0	0	4,114	65,573	1,609
Special Naphthas	-50	15,291	16,073	312	0	0	0	648	30,977	2,841
Lubricants	0	44,651	2,854	-445	0	0	0	4,172	42,888	12,520
Waxes	0	3,992	399	168	0	0	0	338	4,221	609
Petroleum Coke	0	120,886	0	524	0	0	0	53,609	67,801	4,957
Asphalt and Road Oil	0	109,406	2,680	2,889	0	0	0	153	114,823	15,903
Still Gas	0	155,199	0	0	0	0	0	0	155,199	0
Miscellaneous Products	604	15,996	3,035	-65	0	0	0	290	19,280	1,874
Total	2,850,590	3,747,307	1,472,652	-61,082	96,537	270	3,596,025	185,312	4,320,398	1,514,182

<sup>1</sup> Unaccounted for crude oil is a balancing item.

(S) = Less than \$00 barrels.

E = Estimated

Note: Total may not equal sum of components due to independent rounding.  
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 4. Daily Average Supply and Disposition of Crude Oil and Petroleum Products, September 1984  
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied
<b>Crude Oil (including lease condensate)</b>	<b>E 8,759</b>	<b>0</b>	<b>3,294</b>	<b>266</b>	<b>234</b>	<b>-2</b>	<b>12,327</b>	<b>162</b>	<b>66</b>
<b>Natural Gas Liquids and LRGs</b>									
Pentanes Plus	1,662	352	192	1	0	0	529	26	1,851
Liquefied Petroleum Gases	309	0	64	24	0	0	246	(s)	152
Ethane	1,353	352	128	-24	0	0	283	26	1,499
Propane	521	20	18	15	0	0	2	(s)	573
Normal Butane	532	283	57	-61	0	0	3	20	787
Isobutane	200	50	31	19	0	0	152	6	142
	100	-1	21	3	0	0	126	(s)	-3
<b>Other Liquids</b>									
Other Hydrocarbons and Alcohol	40	0	307	-137	0	0	466	0	-257
Unfinished Oils	40	0	0	(s)	0	0	39	0	0
Motor Gasoline Blending Components	0	0	221	-81	0	0	333	0	-192
Aviation Gasoline Blending Components	0	0	86	-53	0	0	97	0	-65
	0	0	0	-4	0	0	-3	0	(s)
<b>Finished Petroleum Products</b>	<b>4</b>	<b>13,545</b>	<b>1,381</b>	<b>-600</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>476</b>	<b>13,854</b>
Finished Motor Gasoline	(s)	6,545	333	-263	0	0	0	2	6,614
Finished Leaded Motor Gasoline	(s)	2,542	161	-70	0	0	0	2	2,632
Finished Unleaded Motor Gasoline	0	4,003	172	-192	0	0	0	0	3,982
Finished Aviation Gasoline	0	23	2	-1	0	0	0	0	25
Naphtha-Type Jet Fuel	0	228	0	1	0	0	0	0	230
Kerosene-Type Jet Fuel	0	933	30	12	0	0	0	1	975
Kerosene	(s)	124	7	-17	0	0	0	(s)	114
Distillate Fuel Oil	2	2,723	285	-322	0	0	0	22	2,665
Residual Fuel Oil	0	861	596	-77	0	0	0	214	1,165
Naphtha < 400 Deg. for Petro Feed Use	0	113	43	1	0	0	0	4	153
Other Oils > 400 Deg. for Petro. Feed Use	0	178	0	5	0	0	0	22	161
Special Naphthas	0	58	36	-8	0	0	0	1	85
Lubricants	0	176	13	-9	0	0	0	12	167
Waxes	0	17	2	-2	0	0	0	1	16
Petroleum Coke	0	443	0	-6	0	0	0	196	241
Asphalt and Road Oil	0	516	33	82	0	0	0	(s)	630
Still Gas	0	564	0	0	0	0	0	0	564
Miscellaneous Products	2	44	1	3	0	0	0	1	49
<b>Total</b>	<b>10,464</b>	<b>13,897</b>	<b>5,173</b>	<b>-470</b>	<b>234</b>	<b>-2</b>	<b>13,322</b>	<b>664</b>	<b>15,315</b>

<sup>1</sup> Unaccounted for crude oil is a balancing item

(s) = Less than 500 barrels

E = Estimated

Note: Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation



Table 5. Year-to-Date Daily Average Supply and Disposition of Crude Oil and Petroleum Products, January - September 1984  
(Thousand Barrels per Day)

Commodity	Supply				Disposition				
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Crude Losses	Refinery Inputs	Exports	Products Supplied
Crude Oil (including lease condensate)	E 8,733	0	3,378	-125	352	1	12,092	183	63
Natural Gas Liquids and LRGs	1,619	375	232	-31	0	0	474	45	1,676
Pentanes Plus	292	0	45	-4	0	0	203	2	127
Liquefied Petroleum Gases	1,327	375	187	-27	0	0	270	43	1,549
Ethane	506	23	74	4	0	0	2	5	599
Propane	520	281	61	-32	0	0	4	25	800
Normal Butane	202	73	32	-4	0	0	146	10	147
Isobutane	98	-1	21	5	0	0	119	2	2
Other Liquids	47	0	308	-15	0	0	559	0	-219
Other Hydrocarbons and Alcohol	47	0	0	(s)	0	0	46	0	0
Unfinished Oils	0	0	233	-4	0	0	402	0	-173
Motor Gasoline Blending Components	0	0	74	-12	0	0	110	0	-47
Aviation Gasoline Blending Components	0	0	(s)	(s)	0	0	(s)	0	(s)
Finished Petroleum Products	5	13,301	1,457	-52	0	0	0	463	14,248
Finished Motor Gasoline	2	6,441	290	-33	0	0	0	5	6,696
Finished Leaded Motor Gasoline	1	2,615	134	23	0	0	0	5	2,768
Finished Unleaded Motor Gasoline	1	3,826	156	-55	0	0	0	0	3,927
Finished Aviation Gasoline	0	25	2	(s)	0	0	0	0	27
Naphtha-Type Jet Fuel	0	211	15	-3	0	0	0	1	223
Kerosene-Type Jet Fuel	0	914	48	-21	0	0	0	4	936
Kerosene	(s)	106	8	-4	0	0	0	(s)	110
Distillate Fuel Oil	1	2,656	257	-10	0	0	0	45	2,857
Residual Fuel Oil	0	867	713	8	0	0	0	170	1,418
Naphtha < 400 Deg for Petro Feed Use	0	128	33	-1	0	0	0	6	153
Other Oils > 400 Deg for Petro Feed Use	0	254	0	1	0	0	0	15	239
Special Naphthas	(s)	56	59	1	0	0	0	2	113
Lubricants	0	163	10	-2	0	0	0	15	157
Waxes	0	15	1	1	0	0	0	1	15
Petroleum Coke	0	441	0	2	0	0	0	196	247
Asphalt and Road Oil	0	399	10	11	0	0	0	1	419
Still Gas	0	566	0	0	0	0	0	0	566
Miscellaneous Products	2	58	11	(s)	0	0	0	1	70
Total	10,404	13,676	5,375	-223	352	1	13,124	691	15,768

<sup>1</sup> Unaccounted for crude oil is a balancing item

(s) = Less than 500 barrels

E = Estimated

Note: Total may not equal sum of components due to independent rounding

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 6. PAD District I, Supply and Disposition of Crude Oil and Petroleum Products, September 1984  
(Thousand Barrels)

Thousands Barrels											
Commodity	Supply				Disposition				Ending Stocks		
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil?	Net Receipts	Crude Losses	Refinery Inputs		Exports	Products Supplied
Crude Oil (including lease condensate)	E 1,722	0	28,643	3,706	-844	1,857	0	35,084	0	0	12,412
Natural Gas Liquids and LRGs	919	989	1,255	-707	0	3,023	0	187	26	5,266	4,230
Liquefied Petroleum Gases	785	989	521	-702	0	3,023	0	146	26	4,444	4,182
Pentanes Plus	134	0	734	-5	0	0	0	41	0	822	48
Other Liquids	19	0	1,767	126	0	570	0	2,050	0	432	17,989
Other Hydrocarbons and Alcohol	19	0	0	-18	0	0	0	1	0	0	117
Unfinished Oils		0	623	-548	0	396	0	848	0	-377	12,444
Motor Gasoline Blending Components	0	0	1,144	692	0	174	0	1,201	0	809	5,428
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	0	37,956	33,656	-10,066	0	65,556	0	0	709	126,394	165,204
Finished Motor Gasoline	0	17,852	8,332	359	0	39,138	0	0	8	65,674	59,471
Finished Leaded Motor Gasoline		5,895	3,887	671	0	12,281	0	0	8	22,726	25,713
Finished Unleaded Motor Gasoline	0	11,957	4,446	-312	0	26,857	0	0	0	42,948	33,758
Finished Aviation Gasoline	0	11	61	-1	0	247	0	0	0	318	382
Naphtha-Type Jet Fuel	0	505	0	186	0	333	0	0	0	1,024	821
Kerosene-Type Jet Fuel	0	1,382	829	-239	0	9,209	0	0	0	11,181	9,441
Kerosene	0	96	208	-240	0	279	0	0	6	337	3,867
Distillate Fuel Oil	0	7,580	7,978	-8,368	0	14,828	0	0	109	21,908	57,549
Residual Fuel Oil	0	3,587	14,901	-3,125	0	440	0	0	219	15,585	25,009
Naphtha and Other Oils for Petro Feed	0	179	11	20	0	-53	0	0	35	122	268
Special Naphthas	0	37	227	-10	0	183	0	0	4	433	611
Lubricants	0	540	313	216	0	599	0	0	64	1,604	3,185
Waxes	0	80	29	-2	0	5	0	0	4	108	82
Petroleum Coke	0	1,095	0	27	0	0	0	0	245	877	865
Asphalt and Road Oil	0	3,291	767	1,031	0	263	0	0	1	5,351	3,439
Still Gas	0	1,555	0	0	0	0	0	0	0	1,555	0
Miscellaneous Products	0	166	(s)	80	0	85	0	0	14	317	214
Total	2,660	38,945	65,322	-6,941	-844	71,006	0	37,321	735	132,092	199,835

<sup>1</sup> Unaccounted for crude oil is a balancing item

(s) = Less than 500 barrels

E = Estimated

Note: Total may not equal sum of components due to independent rounding

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation.

Table 7. PAD District II, Supply and Disposition of Crude Oil and Petroleum Products, September 1984  
(Thousand Barrels)

Commodity	Supply				Disposition						
	Field Production	Refinery Production	Imports	Stock Withdrawal (-) or Addition (+)	Unaccounted For Crude Oil	Net Receipts	Crude Losses	Refinery Inputs	Exports	Products Supplied	Ending Stocks
Crude Oil (including lease condensate)	E 31,332	0	13,045	4,370	36,734	19	-42	85,108	434	0	70,218
Natural Gas Liquids and LRGs	10,245	2,235	2,463	965	0	1,929	0	4,704	13	13,120	36,494
Liquefied Petroleum Gases	8,784	2,235	2,463	233	0	1,560	0	2,813	12	12,450	33,642
Pentanes Plus	1,461	0	0	732	0	369	0	1,891	1	670	2,852
Other Liquids	137	0	271	-2,224	0	374	0	-1,447	0	5	26,700
Other Hydrocarbons and Alcohol	137	0	0	13	0	0	0	150	0	0	120
Unfinished Oils	0	0	271	-1,486	0	344	0	-1,207	0	336	18,482
Motor Gasoline Blending Components	0	0	0	-733	0	30	0	-373	0	-330	8 003
Aviation Gasoline Blending Components	0	0	0	-18	0	0	0	-17	0	-1	95
Finished Petroleum Products	16	89,652	948	-2,814	0	25,885	0	0	286	113,401	126,183
Finished Motor Gasoline	0	49,069	319	-3,476	0	17,016	0	0	1	62,928	58,916
Finished Leaded Motor Gasoline	0	20,205	253	-894	0	8,443	0	0	1	27,967	28,348
Finished Unleaded Motor Gasoline	0	28,864	66	-2,542	0	8,573	0	0	0	34,961	30,568
Finished Aviation Gasoline	0	141	0	-88	0	123	0	0	0	176	609
Naphtha-Type Jet Fuel	0	886	0	-16	0	141	0	0	0	1,011	1,466
Kerosene-Type Jet Fuel	0	4,381	0	-541	0	1,945	0	0	0	5,786	9,875
Kerosene	0	775	0	-210	0	96	0	0	0	661	2,417
Distillate Fuel Oil	0	19,275	382	649	0	6,181	0	0	(s)	26,487	38,610
Residual Fuel Oil	0	1,745	67	145	0	-141	0	0	0	1,816	3,497
Naphtha and Other Oils for Petro Feed	0	912	4	7	0	73	0	0	27	969	180
Special Naphthas	0	412	63	-68	0	142	0	0	4	546	438
Lubricants	0	870	16	64	0	129	0	0	16	1,063	2,089
Waxes	0	45	12	-15	0	0	0	0	1	41	72
Petroleum Coke	0	2,574	0	35	0	0	0	0	232	2,377	770
Asphalt and Road Oil	0	5,200	52	733	0	283	0	0	2	6,266	6,953
Still Gas	0	3176	0	0	0	0	0	0	0	3,176	0
Miscellaneous Products	16	191	31	-33	0	-104	0	0	2	99	291
Total	41,730	91,887	16,726	297	36,734	28,207	-42	88,365	732	126,526	259,595

<sup>1</sup> Unaccounted for crude oil is a balancing item

(s) = Less than 500 barrels

E = Estimated

Note: Total may not equal sum of components due to independent rounding

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation

Table 8. PAD District III, Supply and Disposition of Crude Oil and Petroleum Products, September 1984  
(Thousand Barrels)

Commodity	Supply				Disposition				Ending Stocks		
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>	Net Receipts	Crude Losses	Refinery Inputs		Exports	Products Supplied
Crude Oil (including lease condensate)	E 127,482	0	51,174	-942	-26,595	16,881	-16	167,992	(s)	24	585,638
Natural Gas Liquids and LRGs	34,789	5,853	1,017	-893	0	-3,438	0	9,446	615	27,267	80,201
Liquefied Petroleum Gases	28,392	5,853	189	-936	0	-3,311	0	4,409	615	25,163	73,604
Pentanes Plus	6,397	0	828	43	0	-127	0	5,097	0	2,104	6,597
Other Liquids	805	0	6,455	-1,047	0	-944	0	12,484	0	-7,215	68,556
Other Hydrocarbons and Alcohol	805	0	0	0	0	0	0	805	0	0	91
Unfinished Oils	0	0	5,734	1,074	0	-740	0	10,273	0	-4,205	50,231
Motor Gasoline Blending Components	0	0	721	-2,053	0	-204	0	1,474	0	-3,010	18,043
Aviation Gasoline Blending Components	0	0	0	-68	0	0	0	-68	0	0	191
Finished Petroleum Products	96	192,337	5,229	-7,421	0	-94,078	0	0	5,961	90,202	128,798
Finished Motor Gasoline	1	91,672	516	-4,547	0	-57,784	0	0	37	29,821	51,725
Finished Leaded Motor Gasoline	1	34,395	211	-1,963	0	-21,531	0	0	37	11,056	22,397
Finished Unleaded Motor Gasoline	0	57,277	305	-2,564	0	-36,253	0	0	0	18,765	29,328
Finished Aviation Gasoline	0	263	0	111	0	-397	0	0	0	-23	734
Naphtha-Type Jet Fuel	0	3,461	0	-173	0	-655	0	0	0	2,633	2,714
Kerosene-Type Jet Fuel	0	14,014	0	556	0	-11,841	0	0	(s)	2,729	12,867
Kerosene	1	2,779	0	-133	0	-375	0	0	1	2,271	2,448
Distillate Fuel Oil	47	39,523	1	-1,930	0	-21,150	0	0	461	16,030	32,527
Residual Fuel Oil	0	10,369	2,547	-628	0	-299	0	0	2,327	9,662	9,838
Naphtha and Other Oils for Petro. Feed	0	7,282	1,282	138	0	-20	0	0	480	8,202	2,841
Special Naphthas	0	1,171	773	-173	0	-325	0	0	25	1,422	1,532
Lubricants	0	3,518	27	-612	0	-700	0	0	257	1,976	6,113
Waxes	0	258	28	-27	0	-5	0	0	27	227	404
Petroleum Coke	0	5,708	0	-254	0	0	0	0	2,337	3,117	1,498
Asphalt and Road Oil	0	3,460	44	268	0	-546	0	0	(s)	3,225	2,585
Still Gas	0	8,101	0	0	0	0	0	0	0	8,101	0
Miscellaneous Products	47	758	11	-17	0	19	0	0	9	808	972
Total	163,172	198,190	63,875	-10,303	-26,595	-81,579	-16	189,922	6,576	110,278	863,193

<sup>1</sup> Unaccounted for crude oil is a balancing item

(s) = Less than 500 barrels

E = Estimated

Note: Total may not equal sum of components due to independent rounding

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation

Table 9. PAD District IV, Supply and Disposition of Crude Oil and Petroleum Products, September 1984  
(Thousand Barrels)

Commodity	Supply				Disposition				Ending Stocks		
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>(1)</sup>	Net Receipts	Crude Losses	Refinery Inputs		Exports	Products Supplied
Crude Oil (including lease condensate)	£ 17,028	0	999	-245	-4,532	0	0	13,246	0	4	13,333
Natural Gas Liquids and LRGs	2,814	121	369	768	0	-1,514	0	500	7	2,051	1,286
Liquefied Petroleum Gases	2,007	121	329	800	0	-1,272	0	356	7	1,622	1,020
Pentanes Plus	807	0	39	-32	0	-242	0	144	0	428	266
Other Liquids	0	0	0	-163	0	0	0	-433	0	270	4,226
Other Hydrocarbons and Alcohol	0	0	0	0	0	0	0	0	0	0	0
Unfinished Oils	0	0	0	-234	0	0	0	-489	0	255	2,692
Motor Gasoline Blending Components	0	0	0	71	0	0	0	56	0	15	1,534
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0
Finished Petroleum Products	2	13,380	144	503	0	158	0	0	7	14,181	11,333
Finished Motor Gasoline	0	6,861	50	106	0	145	0	0	0	7,162	4,699
Finished Leaded Motor Gasoline	0	3,923	50	212	0	-58	0	0	0	4,127	2,697
Finished Unleaded Motor Gasoline	0	2,938	1	-106	0	203	0	0	0	3,036	2,002
Finished Aviation Gasoline	0	23	0	-2	0	27	0	0	0	48	50
Naphtha-Type Jet Fuel	0	477	0	-28	0	-179	0	0	0	270	356
Kerosene-Type Jet Fuel	0	590	0	101	0	473	0	0	0	1,164	764
Kerosene	0	4	0	6	0	0	0	0	0	10	31
Distillate Fuel Oil	0	3,404	78	165	0	-308	0	0	0	3,339	3,346
Residual Fuel Oil	0	307	7	-7	0	0	0	0	0	307	539
Naphtha and Other Oils for Petro Feed	0	2	0	-2	0	0	0	0	1	-1	7
Special Naphthas	0	4	(s)	-2	0	0	0	0	0	2	9
Lubricants	0	30	(s)	-2	0	0	0	0	2	26	69
Waxes	0	50	0	-12	0	0	0	0	0	38	12
Petroleum Coke	0	209	0	-10	0	0	0	0	0	196	169
Asphalt and Road Oil	0	905	8	193	0	0	0	0	(s)	1,106	1,258
Sill Gas	0	461	0	0	0	0	0	0	0	461	0
Miscellaneous Products	2	53	0	-3	0	0	0	0	0	52	24
Total	19,844	13,501	1,512	863	-4,532	-1,356	0	13,313	14	16,505	30,178

<sup>1</sup> Unaccounted for crude oil is a balancing item

(s) = Less than 500 barrels

E = Estimated

Note. Total may not equal sum of components due to independent rounding.

Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation

Table 10. PAD District V, Supply and Disposition of Crude Oil and Petroleum Products, September 1984  
(Thousand Barrels)

Commodity	Supply					Net Receipts	Crude Losses	Disposition			Ending Stocks
	Field Production	Refinery Production	Imports	Stock Withdrawal (+) or Addition (-)	Unaccounted For Crude Oil <sup>1</sup>			Refinery Inputs	Exports	Products Supplied	
Crude Oil (including lease condensate)	85,203	0	4,946	1,097	2,253	-18,757	-15	68,380	4,412	1,965	74,799
Natural Gas Liquids and LFGs	1,096	1,347	643	-113	0	0	0	1,027	126	1,820	2,895
Liquefied Petroleum Gases	612	1,347	330	-108	0	0	0	767	126	1,288	2,843
Pentanes Plus	484	0	313	-5	0	0	0	260	0	532	52
Other Liquids	225	0	714	-810	0	0	0	1,333	0	-1,204	31,765
Other Hydrocarbons and Alcohol	225	0	0	-1	0	0	0	224	0	0	6
Unfinished Oils	0	0	2	-1,221	0	0	0	564	0	-1,783	24,622
Motor Gasoline Blending Components	0	0	712	431	0	0	0	564	0	579	7,107
Aviation Gasoline Blending Components	0	0	0	-19	0	0	0	-19	0	0	30
Finished Petroleum Products	0	73,026	1,463	1,808	0	2,479	0	0	7,320	71,456	51,922
Finished Motor Gasoline	0	30,891	770	-322	0	1,485	0	0	3	32,821	19,649
Finished Leaded Motor Gasoline	0	11,850	438	-78	0	865	0	0	3	13,073	8,759
Finished Unleaded Motor Gasoline	0	19,041	331	-244	0	620	0	0	0	19,748	10,890
Finished Aviation Gasoline	0	265	0	-36	0	0	0	0	0	229	644
Naphtha-Type Jet Fuel	0	1,523	0	75	0	360	0	0	0	1,958	1,659
Kerosene-Type Jet Fuel	0	7,622	74	497	0	213	0	0	27	8,379	5,261
Kerosene	0	80	0	75	0	0	0	0	(s)	155	226
Distillate Fuel Oil	0	11,901	103	-190	0	449	0	0	85	12,178	11,182
Residual Fuel Oil	0	9,819	344	1,316	0	0	0	0	3,885	7,594	8,088
Naphtha and Other Oils for Petro. Feed	0	339	0	7	0	0	0	0	213	133	163
Special Naphthas	0	110	19	26	0	0	0	0	1	154	251
Lubricants	0	308	20	58	0	-28	0	0	30	327	1,064
Waxes	0	76	3	0	0	0	0	0	5	74	39
Petroleum Coke	0	3,714	0	14	0	0	0	0	3,067	661	1,655
Asphalt and Road Oil	0	2,615	130	220	0	0	0	0	(s)	2,965	1,668
Still Gas	0	3,626	0	0	0	0	0	0	0	3,626	0
Miscellaneous Products	0	137	1	68	0	0	0	0	4	202	373
Total	86,524	74,373	7,766	1,982	2,253	-16,278	-15	70,740	11,858	74,037	161,381

<sup>1</sup> Unaccounted for crude oil is a balancing item

(s) = Less than 500 barrels

E = Estimated

Note: Total may not equal sum of components due to independent rounding  
Sources and estimation procedures: See Explanatory Notes on Data Collection and Estimation

Table 11. Production of Crude Oil (including Lease Condensate) by PAD District and State, for the Most Currently Available Month,<sup>1</sup> July 1984  
(Thousand Barrels)

PAD District and State		Production		PAD District and State		Production	
		Total	Daily Average			Total	Daily Average
<b>PAD District I</b>							
Florida		1,143	37	<b>PAD District IV</b>		E 2,430	E 78
New York		E 71	E 2	Colorado		E 2,347	E 76
Pennsylvania		E 363	E 12	Montana		E 2,728	E 88
Virginia		E 6	E 0	Utah		E 10,118	E 326
West Virginia		309	10	Wyoming		1	(s)
Adjustment 2		-41	-1	Adjustment 2		E 17,624	E 569
<b>Total PAD District I</b>		<b>E 1,851</b>	<b>E 60</b>	<b>Total PAD District IV</b>			
<b>PAD District II</b>							
Illinois		2,470	80	<b>PAD District V</b>			
Indiana		454	15	Alaska		1,871	60
Kansas		6,294	203	South Alaska		50,858	1,634
Kentucky		669	22	North Slope		2,307	74
Michigan		2,588	83	Adjustment for Alaska <sup>2</sup>		54,836	1,769
Missouri		E 22	E 1	Total Alaska		18	1
Nebraska		538	17	Arizona			
North Dakota		4,526	146	California		6,634	214
Ohio		E 1,271	E 41	Central Coastal		21,484	693
Oklahoma		14,519	468	East Central		15	(s)
South Dakota		114	4	North		6,722	217
Tennessee		80	3	South		34,855	1,124
Adjustment 2		-1,138	-37	Total California		150	5
<b>Total PAD District II</b>		<b>E 32,407</b>	<b>E 1,045</b>	Nevada		-436	-14
<b>PAD District III</b>							
Alabama		1,753	57	Adjustment for Arizona, California, and Nevada <sup>2</sup>		89,423	2,885
Arkansas		E 1,600	E 52	<b>Total PAD District V</b>			
Louisiana				<b>United States Total</b>		<b>E 271,843</b>	<b>E 8,769</b>
Gulf Coast		E 40,842	E 1,317	<sup>1</sup> Includes the following offshore production (thousand barrels)			
Rest of State		2,699	87	Alaska: State - 1,656,			
Total Louisiana		E 43,541	E 1,405	California: Federal - 2,662, State - 3,458,			
Mississippi		2,855	92	Louisiana: Federal - E27,975, State - 2,264,			
New Mexico				Texas: Federal - E1,745, State - 138,			
Northwestern		582	19	U.S. Total - E39,898			
Southeastern		6,043	195	<sup>2</sup> These adjustments are used to reconcile the national and PAD			
Total New Mexico		6,625	214	level sums of the State data with the independently estimated			
Texas				U.S. and Alaskan figures shown in the Summary Statistics portion			
TRRC District 01		2,169	70	of this issue and with the PAD level figures published in a			
TRRC District 02		3,370	109	previous issue. Final data at the State, PAD District and			
TRRC District 03		E 10,404	E 336	national levels will be published without adjustments in the			
TRRC District 04		2,571	83	Petroleum Supply Annual			
TRRC District 05		642	21	(s) = Less than 500 barrels			
TRRC District 06, excluding East Texas		3,638	117	Note. Total may not equal sum of components due to independent rounding			
TRRC District 07B		3,036	98	Source: See Explanatory Notes on Data Collection and Estimation			
TRRC District 07C		3,025	98	E = Estimated			
TRRC District 08		19,685	635				
TRRC District 08A		18,191	587				
TRRC District 09		3,410	110				
TRRC District 10		1,847	60				
East Texas		4,139	134				
Total Texas		76,127	2,456				
Adjustment 2		-1,963	-63				
<b>Total PAD District III</b>		<b>E 130,538</b>	<b>E 4,211</b>				

See footnotes at end of table.

Table 12. Natural Gas Processing Plant Production of Petroleum Products by PAD District,<sup>1</sup> September 1984  
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Dak.	Okla., Kans., Mo	Total	Texas Inland	Texas Gulf Coast	La Gulf Coast	No La., Ark	New Mexico	Total		Dist. IV Rocky Mt.	Dist. V West Coast
Natural Gas Liquids	402	517	919	1	1,774	508	7,962	10,245	19,885	2,816	7,189	662	4,237	34,789	2,814	1,096	49,863
Pentanes Plus	68	66	134	0	229	123	1,109	1,461	3,703	334	1,289	208	863	6,397	807	484	9,283
Liquefied Petroleum Gases	334	451	785	1	1,545	385	6,853	8,784	16,182	2,482	5,900	454	3,374	28,392	2,007	612	40,580
Ethane	103	140	243	0	545	2	3,202	3,749	6,428	1,147	2,663	70	1,035	11,343	297	2	15,634
Propane	139	208	347	1	633	213	2,459	3,306	6,162	1,066	1,991	198	1,381	10,798	1,137	359	15,947
Normal Butane	73	74	147	0	203	139	751	1,093	2,588	104	654	131	656	4,133	439	179	5,991
Isobutane	19	29	48	0	164	31	441	636	1,004	165	592	55	302	2,118	134	72	3,008
Finished Petroleum Products	0	0	0	0	1	0	15	16	35	47	4	3	7	96	2	0	114
Finished Motor Gasoline	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1
Finished Leaded Motor Gasoline	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1
Finished Unleaded Motor Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene-Type Jet Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Kerosene	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Distillate Fuel Oil	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1
Special Naphthas	0	0	0	0	0	0	0	0	0	47	0	0	0	47	0	0	47
Miscellaneous Products	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Production	402	517	919	1	1,775	508	7,977	10,261	19,920	2,863	7,193	665	4,244	34,885	2,816	1,096	49,977

<sup>1</sup> Production represents quantity of natural gas processing plant output less input to fractionating facilities  
Source: See Explanatory Notes on Data Collection and Estimation



Table 13. Refinery Input of Crude Oil and Petroleum Products by PAD District, September 1984  
(Thousand Barrels, Except Where Noted)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ill. Ky	Ind. Wisc. Daks	Minn. Okla. Kans. Mo.	Total	Texas Inland	Texas Gulf Coast	La Gulf Coast	No La. Ark	New Mexico	Total		Rocky Mt	Dist. V West Coast
Crude Oil (including lease condensate)	32,355	2,729	35,084	1,763	54,101	8,985	20,259	85,108	15,640	83,307	61,773	5,573	1,699	167,992	13,246	68,380	369,810
Pentanes Plus	41	0	41	0	817	168	906	1,891	1,097	3,185	507	117	131	5,037	144	260	7,373
Liquefied Petroleum Gases	94	52	146	125	1,519	290	879	2,813	666	1,720	1,891	99	33	4,409	356	767	8,491
Ethane	0	0	0	0	5	0	0	5	0	0	47	0	0	47	0	0	52
Propane	0	0	0	0	68	0	0	68	0	1	29	0	0	30	0	0	98
Normal Butane	0	52	52	48	786	206	448	1,488	294	946	970	31	7	2,248	298	471	4,557
Isobutane	94	0	94	77	660	84	431	1,252	372	773	845	68	26	2,084	58	296	3,784
Other Liquids																	
Other Hydrocarbons and Alcohol	1	0	1	0	131	0	19	150	0	220	582	0	3	805	0	224	1,180
Unfinished Oil (net)	811	37	848	-5	-1,230	75	-47	-1,207	-252	10,984	-300	-201	42	10,273	-489	564	9,989
Motor Gasoline Blending Components (net)	1,221	-20	1,201	19	-266	-163	37	-373	-10	257	1,279	-37	-15	1,474	56	564	2,922
Aviation Gasoline Blending Components (net)	0	0	0	0	-12	0	-5	-17	0	26	-94	0	0	-68	0	-19	-104
Total Input to Refineries	34,523	2,798	37,321	1,902	55,060	9,355	22,048	88,365	17,141	99,699	65,638	5,551	1,893	189,922	13,313	70,740	399,661
Crude Oil Distillation																	
Gross Input (daily average)	1,114	91	1,205	59	1,812	310	687	2,869	525	2,855	2,087	189	57	5,714	443	2,301	12,532
Operable Capacity (daily average)	1,404	174	1,578	66	2,329	304	791	3,490	610	3,769	2,528	295	107	7,308	558	3,060	15,994
Operating Ratio (percent) <sup>1</sup>	79.4	52.2	76.3	89.0	77.8	102.0	86.9	82.2	86.1	75.8	82.6	64.2	53.6	78.2	79.4	75.2	78.4
Crude Oil Qualities																	
Sulfur Content, Weighted Average (percent)	1.07	39	1.02	.57	.86	1.80	.46	.86	.74	1.02	.78	1.41	.77	.92	.98	1.08	94
API Gravity, Weighted Average	30.81	40.59	31.61	36.55	36.05	30.52	37.25	35.78	37.94	34.52	33.65	32.88	39.44	34.51	34.89	25.30	32.83
Operable Capacity (daily average)	1,404	174	1,578	66	2,329	304	791	3,490	610	3,769	2,528	295	107	7,308	558	3,060	15,994
Operating	1,302	110	1,412	66	2,027	299	740	3,132	568	3,464	2,362	250	71	6,715	530	2,848	14,636
Idle	102	64	166	0	302	5	51	358	41	306	165	45	36	594	28	213	1,359

<sup>1</sup> Represents gross input divided by operable capacity.

Note: Total may not equal sum of components due to independent rounding  
Source: See Explanatory Notes on Data Collection and Estimation.

Table 14. Refinery Production of Petroleum Products by PAD District, September 1984  
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III				PAD		United States			
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill.	Ky	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La Gulf Coast	No La., Ark.	New Mexico		Total	PAD Rocky Mt	PAD Dist V West Coast
Liquefied Refinery Gases .....	961	28	989	36	1,671	231	297	2,235	32	2,863	2,843	44	71	5,853	121	1,347	10,545	
For Petrochemical Feedstock Use .....	224	0	224	0	178	2	66	246	30	1,366	1,538	6	0	2,940	5	163	3,578	
For Other Uses .....	737	28	765	36	1,493	229	231	1,989	2	1,497	1,305	38	71	2,913	116	1,184	6,967	
Ethane .....	23	0	23	0	0	0	0	0	0	553	16	0	0	569	0	0	592	
For Petrochemical Feedstock Use .....	0	0	0	0	0	0	0	0	0	314	1	0	0	315	0	0	315	
For Other Uses .....	23	0	23	0	0	0	0	0	0	239	15	0	0	254	0	0	277	
Propane ...	827	28	855	36	1,661	229	493	2,419	190	2,507	1,370	33	48	4,148	126	931	8,479	
For Petrochemical Feedstock Use .....	223	0	223	0	178	0	66	244	30	1,101	253	0	0	1,384	0	150	2,001	
For Other Uses .....	604	28	632	36	1,483	229	427	2,175	160	1,406	1,117	33	48	2,764	126	781	6,478	
Normal Butane .....	111	0	111	0	10	0	-196	-186	-158	-167	1,457	11	23	1,166	-8	416	1,499	
For Petrochemical Feedstock Use .....	1	0	1	0	0	0	0	0	0	-19	1,284	6	0	1,271	2	13	1,287	
For Other Uses .....	110	0	110	0	10	0	-196	-186	-158	-148	173	5	23	-105	-10	403	212	
Isobutane for Petro Feed Use .....	0	0	0	0	0	2	0	2	0	-30	0	0	0	-30	3	0	-25	
Finished Motor Gasoline .....	16,759	1,093	17,852	1,055	31,047	4,617	12,350	49,069	8,675	48,367	32,205	1,465	960	91,672	6,861	30,891	196,345	
Finished Leaded Motor Gasoline .....	5,451	444	5,895	415	11,077	2,247	6,466	20,205	4,289	16,772	11,852	989	493	34,395	3,923	11,850	76,268	
Finished Unleaded Motor Gasoline .....	11,308	649	11,957	640	19,970	2,370	5,884	28,864	4,386	31,595	20,353	476	467	57,277	2,938	19,041	120,077	
Finished Aviation Gasoline .....	11	0	11	0	116	0	25	141	-49	196	116	0	0	263	23	265	703	
Naphtha-Type Jet Fuel .....	476	29	505	77	439	108	262	886	913	1,297	755	167	329	3,461	477	1,523	6,852	
Kerosene-Type Jet Fuel .....	1,382	0	1,382	10	3,001	430	940	4,381	1,058	5,845	7,081	8	22	14,014	590	7,622	27,989	
Kerosene .....	58	38	96	96	649	48	-20	775	10	1,529	1,258	12	-30	2,779	4	80	3,734	
Distillate Fuel Oil .....	6,765	815	7,580	439	10,936	2,185	5,715	19,275	3,723	21,072	12,626	1,725	377	39,523	3,404	11,901	81,683	
Residual Fuel Oil .....	3,526	61	3,587	68	1,251	225	201	1,745	706	6,556	2,889	213	5	10,369	307	9,819	25,827	
Naphtha < 400 Deg For Petro Feed Use .....	171	0	171	0	636	0	102	738	98	2,107	121	17	0	2,343	0	136	3,388	
Other Oils > 400 Deg For Petro Feed Use .....	8	0	8	0	174	0	0	174	188	3,207	1,544	0	0	4,939	2	203	5,326	
Special Naphthas .....	7	30	37	0	178	0	234	412	78	858	131	104	0	1,171	4	110	1,734	
Lubricants .....	186	354	540	0	523	0	347	870	18	2,261	845	394	0	3,518	30	308	5,266	
Waxes ...	0	80	80	0	20	0	25	45	8	134	64	52	0	258	50	76	509	
Petroleum Coke .....	1,077	18	1,095	27	1,701	268	578	2,574	266	3,113	2,254	64	11	5,708	209	3,714	13,300	
Marketable .....	499	0	499	0	796	197	363	1,356	64	1,505	1,559	34	0	3,162	61	2,878	7,956	
Catalyst .....	578	18	596	27	905	71	215	1,218	202	1,608	695	30	11	2,546	148	836	5,344	
Asphalt and Road Oil .....	3,186	105	3,291	113	3,007	1,245	835	5,200	556	441	1,256	1,089	118	3,460	905	2,615	15,471	
Still Gas .....	1,433	122	1,555	52	2,165	263	676	3,176	451	4,860	2,590	150	50	8,101	461	3,626	16,919	
For Petrochemical Feedstock Use .....	228	0	228	0	0	0	0	0	0	546	237	0	0	783	2	108	1,121	
For Other Uses .....	1,205	122	1,327	52	2,165	283	676	3,176	451	4,314	2,353	150	50	7,318	459	3,518	15,798	
Miscellaneous Products .....	114	52	166	3	77	24	87	191	-1	476	243	40	0	758	53	137	1,305	
Fuel Use .....	6	25	31	0	0	0	4	4	0	-15	184	0	0	169	16	13	233	
Non-Fuel Use .....	108	27	135	3	77	24	83	187	-1	491	59	40	0	589	37	124	1,072	
Total Production .....	36,120	2,825	38,945	1,978	57,591	9,664	22,654	91,887	16,730	105,182	68,821	5,544	1,913	198,190	13,501	74,373	416,896	
Processing Gain(-) or Loss(+) <sup>1</sup> .....	-1,597	-27	-1,624	-76	-2,531	-309	-606	-3,522	411	-5,483	-3,183	7	-20	-8,268	-188	-3,633	-17,235	

<sup>1</sup> Represents the arithmetic difference between input and output  
Note See Explanatory Note 2  
Source See Explanatory Notes on Data Collection and Estimation

Table 15. Percent Refinery Yield of Petroleum Products by PAD District, September 1984

Commodity	PAD District I			PAD District II				PAD District III				PAD District IV		United States			
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. La. Ark.	New Mexico		Total	Rocky Mt.	Dist. V West Coast
Finished Motor Gasoline <sup>2</sup>	46.4	38.4	45.8	51.8	54.6	47.7	52.0	53.1	45.0	45.6	45.5	23.9	46.4	44.8	49.4	42.2	46.4
Finished Aviation Gasoline <sup>3</sup>	0	.0	0	0	2	.0	1	2	-3	2	3	.0	0	2	2	4	2
Liquefied Refinery Gases	2.9	1.0	2.8	2.0	3.2	2.5	1.5	2.7	2	3.0	4.6	8	4.1	3.3	9	2.0	2.8
Naphtha-Type Jet Fuel	1.4	1.0	1.4	4.4	8	1.2	1.3	1.1	5.9	1.4	1.2	3.1	18.9	1.9	3.7	2.2	1.8
Kerosene-Type Jet Fuel	4.2	0	3.8	6	5.7	4.7	4.7	5.2	6.9	6.2	11.5	1	1.3	7.9	4.6	11.1	7.4
Kerosene	2	1.4	3	5.6	1.2	.5	-1	9	1	1.6	2.0	2	-1.7	1.6	0	1	1.0
Distillate Fuel Oil	20.4	29.5	21.1	25.0	20.7	24.1	28.3	23.0	24.2	22.3	20.5	32.1	21.7	22.2	26.7	17.3	21.5
Residual Fuel Oil	10.6	2.2	10.0	3.9	2.4	2.5	1.0	2.1	4.6	7.0	4.7	4.0	3	5.8	2.4	14.2	6.8
Naphtha < 400 Deg F. Petro. Feed Use	5	0	5	0	1.2	0	5	9	6	2.2	2	3	0	1.3	0	2	9
Other Oils > 400 Deg F. Petro Feed Use	0	0	0	0	3	0	0	2	1.2	3.4	2.5	0	0	2.8	0	3	1.4
Special Naphthas	0	1.1	1	0	.3	0	1.2	5	5	9	2	1.9	0	7	0	2	5
Lubricants	6	12.8	1.5	0	10	0	1.7	1.0	.1	2.4	1.4	7.3	0	2.0	2	4	1.4
Waxes	.0	2.9	.2	0	0	0	1	.1	.1	1	1	1.0	0	1	4	1	1
Petroleum Coke	3.2	7	3.0	1.5	3.2	3.0	2.9	3.1	1.7	3.3	3.7	1.2	6	3.2	1.6	5.4	3.5
Asphalt and Road Oil	9.6	3.8	9.2	6.4	5.7	13.7	4.1	6.2	3.6	5	2.0	20.3	6.8	1.9	7.1	3.8	4.1
Still Gas	4.3	4.4	4.3	3.0	4.1	3.1	3.3	3.8	2.9	5.2	4.2	2.8	2.9	4.5	3.6	5.3	4.5
Miscellaneous Products	.3	1.9	.5	.2	1	.3	4	.2	.0	5	4	7	0	4	4	2	3
Processing Gain(-) or Loss(+) <sup>4</sup>	-4.8	-1.0	-4.5	-4.3	-4.8	-3.4	-3.0	-4.2	2.7	-5.8	-5.2	.1	-1.1	-4.6	-1.5	-5.3	-4.5

1 Based on crude oil input and net returns of unfinished oils

2 Based on total finished motor gasoline output plus net output of motor gasoline blending components, minus input of natural gas plant liquids, other hydrocarbons and alcohol

3 Based on finished aviation gasoline output plus net output of aviation gasoline blending components

4 Represents the difference between input and production

Note: Total may not equal sum of components due to independent rounding

Note: See Explanatory 2

Source: See Explanatory Notes on Data Collection and Estimation.

Table 16. Imports of Crude Oil and Petroleum Products by PAD District, September 1984  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts						Total
	I	II	III	IV	V		
<b>Crude Oil (Including lease condensate) 1 2</b>	<b>28,643</b>	<b>13,045</b>	<b>51,174</b>	<b>999</b>	<b>4,946</b>		<b>98,807</b>
<b>Natural Gas Liquids</b>							
Pentanes Plus	1,255	2,463	1,017	369	643		5,746
Liquefied Petroleum Gases	734	0	828	39	313		1,915
Ethane	521	2,463	189	329	330		3,832
Propane	0	553	0	0	0		553
Normal Butane	196	1,233	82	148	63		1,722
Isobutane	130	406	68	109	161		938
		271	39	73	107		619
<b>Other Liquids 1</b>	<b>1,767</b>	<b>271</b>	<b>6,455</b>	<b>0</b>	<b>714</b>		<b>9,207</b>
Unfinished Oils 1	623	271	5,734	0	2		6,630
Motor Gasoline Blending Components	1,144	0	721	0	712		2,576
Aviation Gasoline Blending Components	0	0	0	0	0		0
<b>Finished Petroleum Products</b>	<b>33,656</b>	<b>948</b>	<b>5,229</b>	<b>144</b>	<b>1,463</b>		<b>41,441</b>
Finished Motor Gasoline	8,332	319	516	50	770		9,988
Finished Leaded Motor Gasoline	3,887	253	211	50	438		4,840
Finished Unleaded Motor Gasoline	4,446	66	305	1	331		5,148
Finished Aviation Gasoline	61	0	0	0	0		61
Naphtha-Type Jet Fuel	0	0	0	0	0		0
Kerosene-Type Jet Fuel	829	0	0	0	0		829
Bonded Aircraft Fuel	0	0	0	0	74		74
Other	0	0	0	0	0		0
Kerosene	829	0	0	0	74		903
Distillate Fuel Oil	208	0	0	0	0		208
Bonded Ships Bunkers	7,978	382	1	78	103		8,543
Other	0	0	0	0	0		0
Residual Fuel Oil	7,978	382	1	78	103		8,543
Bonded Ships Bunkers	14,901	67	2,547	7	344		17,866
Other	0	0	0	0	0		0
Naphtha < 400 Deg. for Petro Feed Use	14,901	67	2,547	7	344		17,866
Other Oils > 400 Deg. for Petro Feed Use	11	4	1,282	7	0		1,297
Special Naphthas	0	0	0	0	0		0
Lubricants	227	63	773	(S)	19		1,083
Waxes	313	16	27	(S)	20		376
Asphalt and Road Oil	29	12	28	0	3		73
Miscellaneous Products	767	52	44	8	130		1,001
	(S)	31	11	0	1		43
<b>Total Imports</b>	<b>65,322</b>	<b>16,726</b>	<b>63,875</b>	<b>1,512</b>	<b>7,766</b>		<b>155,201</b>

1 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry

2 Includes crude oil imported for storage in the Strategic Petroleum Reserve

(S) = Less than 500 barrels

Note: Total may not equal sum of components due to independent rounding

Source: See Explanatory Notes on Data Collection and Estimation

Table 17. Year-to-Date Imports of Crude Oil and Petroleum Products by PAD District, January - September 1984  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) 1 2	244,397	137,428	482,867	8,642	52,220	925,554
Natural Gas Liquids	12,295	36,661	5,577	4,295	4,724	63,552
Pentanes plus	8,111	0	2,425	894	823	12,252
Liquefied Petroleum Gases	4,184	36,661	3,152	3,401	3,901	51,300
Ethane	1	20,157	0	0	0	20,158
Propane	2,397	10,481	1,427	1,709	605	16,618
Normal Butane	1,072	3,614	1,097	1,016	1,978	8,775
Isobutane	714	2,409	629	677	1,319	5,748
Other Liquids 1	27,205	3,195	43,335	0	10,651	84,386
Unfinished Oils 1	16,050	3,120	40,528	0	4,271	63,970
Motor Gasoline Blending Components	11,155	75	2,807	0	6,374	20,411
Aviation Gasoline Blending Components	0	0	0	0	6	6
Finished Petroleum Products	325,440	9,711	47,348	1,811	13,850	399,160
Finished Motor Gasoline	66,579	1,162	5,836	561	5,279	79,416
Finished Leaded Motor Gasoline	30,285	794	3,241	535	1,873	36,729
Finished Unleaded Motor Gasoline	36,294	368	2,594	26	3,406	42,687
Finished Aviation Gasoline	587	0	0	2	7	596
Naphtha-Type Jet Fuel	2,286	0	1,888	0	8	4,182
Kerosene-Type Jet Fuel	11,835	0	0	0	1,256	13,091
Bonded Aircraft Fuel	0	0	0	0	0	0
Other	11,835	0	0	0	1,256	13,091
Kerosene	2,174	0	6	0	(5)	2,180
Distillate Fuel Oil	64,366	2,415	1,029	1,095	1,569	70,474
Bonded Ships Bunkers	0	0	0	0	0	0
Other	64,366	2,415	1,029	1,095	1,569	70,474
Residual Fuel Oil	169,939	1,644	19,845	115	3,712	195,256
Bonded Ships Bunkers	0	0	0	0	0	0
Other	169,939	1,644	19,845	115	3,712	195,256
Naphtha < 400 Deg. for Petro. Feed Use	726	108	8,092	0	0	8,926
Other Oils > 400 Deg. for Petro. Feed Use	0	0	0	0	0	0
Special Naphthas	2,652	3,729	8,547	4	1,142	16,073
Lubricants	1,814	101	307	1	631	2,854
Waxes	134	55	183	0	27	399
Asphalt and Road Oil	2,188	128	143	32	189	2,680
Miscellaneous Products	1,162	369	1,472	2	29	3,035
Total Imports	610,336	186,994	579,128	14,749	81,445	1,472,652

1 Crude oil and unfinished oils are reported by the PAD District in which they are to be processed; all other products are reported by the PAD District of entry

2 Includes crude oil imported for storage in the Strategic Petroleum Reserve

(S) = Less than 500 barrels

Note Total may not equal sum of components due to independent rounding.

Sources See Explanatory Notes on Data Collection and Estimation

Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District, September 1984  
(Thousand Barrels)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil Fuel Oil	Resid Fuel Oil	Special Naphtas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
All PAD Districts														
Arab OPEC														
Algeria	5,607	132	0	158	0	0	0	832	940	243	2,393	4,697	10,304	343
Iraq	590	0	0	0	0	0	0	0	0	0	0	0	590	20
Kuwait	799	0	0	0	0	0	0	0	334	0	0	334	1,133	38
Saudi Arabia	4,633	125	0	0	0	0	0	0	0	0	0	0	4,758	159
United Arab Emirates	1,398	0	0	664	357	0	0	411	546	0	0	1,978	3,377	113
Subtotal Arab OPEC	13,027	256	0	822	357	0	0	1,243	1,820	243	2,393	7,134	20,161	672
Other OPEC														
Ecuador	1,110	0	0	0	0	0	0	0	178	0	0	178	1,288	43
Gabon	1,398	0	0	0	0	0	0	0	0	0	0	0	1,398	47
Indonesia	8,532	0	396	0	88	23	0	9	132	269	545	1,462	9,994	333
Iran	516	0	0	0	0	0	0	0	0	0	0	0	516	17
Nigeria	4,187	0	0	0	0	0	0	0	612	0	0	612	4,799	160
Venezuela	8,553	0	1,530	0	2,491	112	113	2,533	4,757	0	575	12,112	20,665	689
Subtotal Other OPEC	24,296	0	1,926	0	2,579	135	113	2,542	5,679	269	1,120	14,364	38,660	1,289
Other														
Angola	2,733	0	0	0	0	0	0	0	0	0	0	0	2,733	91
Australia	0	0	0	0	146	0	0	2	9	0	0	157	157	5
Bahamas	0	0	792	253	0	292	0	408	1,288	0	0	3,034	3,034	101
Brazil	0	0	0	0	730	0	0	0	947	0	(s)	1,677	1,677	56
Canada	9,546	3,384	397	0	836	0	7	1,068	220	98	558	6,567	16,113	537
Congo	832	0	0	0	0	0	0	0	185	0	(s)	185	1,017	34
Egypt	494	0	0	0	0	0	0	0	0	0	0	0	494	16
France	0	0	0	0	0	0	0	0	0	0	0	0	0	(s)
Mexico	20,199	190	1,377	0	287	64	0	1	604	0	136	2,660	22,859	762
Netherlands	1	(s)	0	0	232	0	0	305	0	0	7	544	545	18
Netherlands Antilles	0	0	859	0	211	0	0	220	2,641	35	27	3,993	3,993	133
Norway	4,700	0	0	0	0	0	0	0	0	0	0	0	4,700	157
Oman	0	0	0	0	0	0	0	0	0	0	0	0	0	0
People's Republic of China	336	0	0	1,022	343	0	0	0	0	0	0	1,365	1,700	57
Peru	0	0	198	0	0	0	0	0	272	0	(s)	470	470	16
Puerto Rico	0	0	50	0	505	0	0	70	0	212	297	1,134	1,134	38
Romania	0	0	0	479	995	0	0	0	0	0	0	1,475	1,475	49
Spain	0	0	0	0	0	0	0	0	0	2	142	144	144	5
Trinidad and Tobago	2,798	0	0	0	0	0	0	284	0	0	0	284	3,082	103
United Kingdom	14,489	0	0	0	213	0	0	0	0	0	(s)	213	14,701	490
Virgin Islands	0	0	1,031	0	1,137	361	88	1,035	3,711	0	0	7,363	7,363	245
Zaire	973	0	0	0	0	0	0	0	0	0	0	0	973	32
Other Western Hemisphere	0	0	0	0	0	0	0	0	0	58	0	58	58	2
Other Eastern Hemisphere	4,382	(s)	0	0	1,416	51	0	1,365	490	167	80	3,570	7,952	265
Subtotal Other	61,483	3,575	4,704	1,754	7,051	769	95	4,758	10,367	572	1,252	34,896	96,379	3,213
Total Imports	98,807	3,832	6,630	2,576	9,988	903	208	8,543	17,866	1,083	4,765	56,394	155,201	5,173
PAD District I														
Arab OPEC														
Algeria	1,605	132	0	0	0	0	0	832	525	0	524	2,012	3,617	121
Kuwait	0	0	0	0	0	0	0	0	0	0	0	0	0	0

See footnotes at end of table.

Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District, September 1984  
(Thousand Barrels) (continued)

Source	Crude Oil 1	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distil Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Products 2	Total Products	Total Petroleum	Total (Daily Average)
PAD District I														
Saudi Arabia .....	1,581	125	0	0	0	0	0	0	0	0	0	125	1,705	57
United Arab Emirates ..	399	0	0	664	357	0	0	411	0	0	0	1,433	1,832	61
Subtotal Arab OPEC ..	3,585	256	0	664	357	0	0	1,243	525	0	524	3,570	7,154	238
Other OPEC														
Ecuador .....	0	0	0	0	0	0	0	0	178	0	0	178	178	6
Gabon .....	605	0	0	0	0	0	0	0	0	0	0	0	605	20
Indonesia .....	2,085	0	0	0	0	0	0	0	0	0	0	0	2,085	69
Nigeria .....	1,303	0	0	0	0	0	0	0	449	0	0	449	1,752	58
Venezuela .....	2,345	0	0	0	2,491	112	113	2,478	4,410	0	474	10,078	12,423	414
Subtotal Other OPEC ..	6,338	0	0	0	2,491	112	113	2,478	5,037	0	474	10,705	17,043	568
Other														
Angola .....	2,008	0	0	0	0	0	0	0	0	0	0	0	2,008	67
Bahamas .....	0	0	0	0	0	292	0	408	1,288	0	0	1,989	1,989	66
Brazil .....	0	0	0	0	730	0	0	0	947	0	(s)	1,677	1,677	56
Canada .....	1,185	264	124	0	365	0	7	617	144	15	393	1,929	3,114	104
Congo .....	150	0	0	0	0	0	0	0	185	0	0	185	335	11
Egypt .....	493	0	0	0	0	0	0	0	0	0	0	0	493	16
France .....	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico .....	3,384	0	0	0	287	64	0	0	293	0	60	705	4,088	136
Netherlands .....	0	(s)	0	0	232	0	0	305	0	0	(s)	537	537	18
Netherlands Antilles ..	0	0	0	0	0	0	0	220	2,467	0	0	2,687	2,687	90
Norway .....	1,546	0	0	0	0	0	0	0	0	0	0	0	1,546	52
People's Republic of China	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peru .....	0	0	0	0	0	0	0	0	272	0	(s)	272	272	9
Puerto Rico .....	0	0	50	0	505	0	0	70	0	212	297	1,134	1,134	38
Romania .....	0	0	0	479	590	0	0	0	0	0	0	1,170	1,170	39
Spain .....	0	0	0	0	0	0	0	0	0	0	142	142	142	5
Trinidad and Tobago ..	453	0	0	0	0	0	0	284	0	0	0	284	737	25
United Kingdom .....	7,741	0	0	0	213	0	0	0	0	0	(s)	213	7,954	265
Virgin Islands .....	0	0	450	0	1,137	361	88	1,035	3,450	0	0	6,521	6,521	217
Zaire .....	672	0	0	0	0	0	0	0	0	0	0	0	672	22
Other Western Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Eastern Hemisphere	1,088	0	0	0	1,324	0	0	1,319	292	0	25	2,961	4,049	135
Subtotal Other .....	18,721	265	623	479	5,484	717	95	4,258	9,339	227	918	22,404	41,125	1,371
Total Imports .....	28,643	521	623	1,144	8,332	829	208	7,978	14,901	227	1,915	36,678	65,322	2,177
PAD District II														
Arab OPEC														
Algeria .....	535	0	0	0	0	0	0	0	0	0	0	0	535	18
Subtotal Arab OPEC ..	535	0	0	0	0	0	0	0	0	0	0	0	535	18
Other OPEC														
Ecuador .....	346	0	0	0	0	0	0	0	0	0	0	0	346	12
Iran .....	516	0	0	0	0	0	0	0	0	0	0	0	516	17
Venezuela .....	0	0	0	0	0	0	0	55	0	0	0	55	55	2
Subtotal Other OPEC ..	862	0	0	0	0	0	0	55	0	0	0	55	917	31

See footnotes at end of table.

Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District, September 1984  
(Thousand Barrels) (continued)

Source	Crude Oil	LPG	Unfinished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kerosene	Distill Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Products	Total Products	Total Petroleum	Total (Daily Average)
PAD District II														
Other														
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	6,946	2,463	271	0	319	0	0	327	67	63	116	3,626	10,571	352
France	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	3,274	0	0	0	0	0	0	0	0	0	0	0	3,274	109
Norway	557	0	0	0	0	0	0	0	0	0	0	0	557	19
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United Kingdom	870	0	0	0	0	0	0	0	0	0	0	0	870	29
Other Eastern Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Other	11,647	2,463	271	0	319	0	0	327	67	63	116	3,626	15,274	509
Total Imports	13,045	2,463	271	0	319	0	0	382	67	63	116	3,681	16,726	558
PAD District III														
Arab OPEC														
Algeria	3,467	0	0	158	0	0	0	0	414	243	1,869	2,684	6,151	205
Iraq	590	0	0	0	0	0	0	0	0	0	0	0	590	20
Kuwait	799	0	0	0	0	0	0	0	334	0	0	334	1,133	38
Saudi Arabia	3,053	0	0	0	0	0	0	0	0	0	0	0	3,053	102
United Arab Emirates	999	0	0	0	0	0	0	0	546	0	0	546	1,345	51
Subtotal Arab OPEC	8,907	0	0	158	0	0	0	0	1,294	243	1,869	3,564	12,472	416
Other OPEC														
Ecuador	764	0	0	0	0	0	0	0	0	0	0	0	764	25
Gabon	793	0	0	0	0	0	0	0	0	0	0	0	793	26
Indonesia	1,918	0	396	0	0	0	0	0	0	269	232	897	2,815	94
Nigeria	2,884	0	0	0	0	0	0	0	163	0	0	163	3,047	102
Venezuela	6,208	0	1,530	0	0	0	0	0	347	0	34	1,911	8,120	271
Subtotal Other OPEC	12,567	0	1,926	0	0	0	0	0	510	269	266	2,972	15,539	518
Other														
Angola	725	0	0	0	0	0	0	0	0	0	0	0	725	24
Australia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bahamas	0	0	792	253	0	0	0	0	0	0	0	1,046	1,046	35
Canada	(s)	0	0	0	0	0	0	0	0	0	0	0	(s)	(s)
Congo	682	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Egypt	(s)	0	0	0	0	0	0	0	0	0	0	0	(s)	(s)
France	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mexico	13,541	189	1,377	0	0	0	0	0	0	0	4	4	15,428	514
Netherlands	1	0	0	0	0	0	0	1	308	0	12	1,886	15,428	514
Netherlands Antilles	0	0	859	0	211	0	0	0	174	35	27	1,307	1,307	44
Norway	2,596	0	0	0	0	0	0	0	0	0	0	0	2,596	87
Oman	0	0	0	0	0	0	0	0	0	0	0	0	0	0
People's Republic of China	336	0	0	310	0	0	0	0	0	0	0	0	645	22
Peru	0	0	198	0	0	0	0	0	0	0	0	0	645	22
Romania	0	0	0	0	325	0	0	0	0	0	0	0	645	22
Spain	0	0	0	0	0	0	0	0	0	0	0	0	645	22
Trinidad and Tobago	2,345	0	0	0	0	0	0	0	0	0	0	0	2,345	77
United Kingdom	5,877	0	0	0	0	0	0	0	0	0	0	0	5,877	196
Virgin Islands	0	0	532	0	0	0	0	0	0	0	0	0	532	18

See footnotes at end of table



Table 18. Imports of Crude Oil and Petroleum Products by Source and PAD District, September 1984  
(Thousand Barrels) (continued)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Prod- ucts 2	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
PAD District III														
Zaire .....	301	0	0	0	0	0	0	0	0	0	0	0	301	10
Other Western Hemisphere .....	0	0	0	0	0	0	0	0	0	58	0	58	58	2
Other Eastern Hemisphere .....	3,294	0	0	0	0	0	0	0	0	167	35	202	3,496	117
Subtotal Other .....	29,700	189	3,808	593	516	0	0	1	742	262	85	6,165	35,865	1,195
Total Imports .....	51,174	189	5,734	721	516	0	0	1	2,547	773	2,220	12,701	63,875	2,129
PAD District IV														
Other														
Canada .....	999	329	0	0	50	0	0	78	7	(s)	48	513	1,512	50
Other Eastern Hemisphere .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Other .....	999	329	0	0	50	0	0	78	7	(s)	48	513	1,512	50
Total Imports .....	999	329	0	0	50	0	0	78	7	(s)	48	513	1,512	50
PAD District V														
Other OPEC														
Indonesia .....	4,529	0	0	0	88	23	0	9	132	0	313	565	5,094	170
Venezuela .....	0	0	0	0	0	0	0	0	0	0	67	67	67	2
Subtotal Other OPEC .....	4,529	0	0	0	88	23	0	9	132	0	380	632	5,161	172
Other														
Australia .....	0	0	0	0	146	0	0	2	9	0	0	157	157	5
Brazil .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada .....	416	328	2	0	101	0	0	46	3	19	1	500	916	31
France .....	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Mexico .....	0	2	0	0	0	0	0	0	2	0	65	69	69	2
Netherlands Antilles .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
People's Republic of China .....	0	0	0	0	343	0	0	0	0	0	0	1,055	1,055	35
Spain .....	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United Kingdom .....	0	(s)	0	0	0	0	0	0	0	0	0	0	0	0
Other Eastern Hemisphere .....	0	0	0	0	92	51	0	46	198	0	20	407	407	14
Subtotal Other .....	416	330	2	712	681	51	0	94	212	19	86	2,188	2,605	87
Total Imports .....	4,945	330	2	712	770	74	0	103	344	19	466	2,820	7,766	259

1 Includes crude oil imported for storage in the Strategic Petroleum Reserve

2 Includes aviation gasoline, aviation gasoline blending components, waxes, asphalt, lubricants, pentanes plus, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products (s) = Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding

Source: See Explanatory Notes on Data Collection and Estimation.

Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District, January - September 1984  
(Thousand Barrels)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil Fuel Oil	Resid Fuel Oil	Special Naphtas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
All PAD Districts														
<b>Arab OPEC</b>														
Algeria	54,307	367	598	158	434	327	0	6,132	16,172	3,210	8,840	36,238	90,544	330
Iraq	2,769	0	0	0	0	0	0	0	0	0	0	0	2,769	10
Kuwait	5,550	0	0	0	0	0	0	0	4,019	0	0	4,019	9,569	35
Qatar	1,497	0	0	0	0	0	0	0	0	0	0	0	1,497	5
Saudi Arabia	93,979	917	1,119	0	0	0	0	0	1,013	0	(s)	3,049	97,028	354
United Arab Emirates	21,173	0	1,049	1,657	357	221	0	411	2,291	0	1,879	7,865	29,038	106
Subtotal Arab OPEC	179,275	1,284	2,766	1,815	791	548	0	6,543	23,495	3,210	10,719	51,171	230,446	841
<b>Other OPEC</b>														
Ecuador	13,439	0	0	0	0	0	0	0	2,581	0	0	2,581	16,020	58
Gabon	15,405	0	0	0	0	0	0	0	246	60	0	306	15,712	57
Indonesia	77,105	1,356	2,432	0	1,244	190	0	340	5,467	964	618	12,610	89,715	327
Iran	2,588	0	0	0	0	0	0	0	0	0	0	0	2,588	9
Nigeria	59,447	0	1,582	0	0	0	0	53	865	0	248	2,748	62,195	227
Venezuela	69,468	0	5,886	790	16,778	4,132	113	16,829	32,395	68	1,890	78,672	148,140	541
Subtotal Other OPEC	237,452	1,356	9,700	790	18,022	4,323	113	17,222	41,554	1,092	2,746	96,917	334,369	1,220
<b>Other</b>														
Angola	24,153	0	0	0	0	0	0	0	809	0	0	809	24,962	91
Australia	3,572	427	0	0	585	76	0	167	1,502	0	208	2,964	6,537	24
Bahamas	0	0	7,011	253	0	950	69	4,664	6,584	0	2,352	21,883	21,883	80
Bolivia	260	0	0	0	0	0	0	0	0	0	0	0	260	1
Brazil	2	0	0	0	6,373	0	0	0	8,114	260	24	14,772	14,773	54
Brunei	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	90,354	45,731	3,024	75	5,115	216	50	9,250	6,555	4,372	3,818	78,306	168,660	616
Congo	9,774	0	0	0	0	0	0	0	1,691	0	(s)	1,691	11,465	42
Egypt	3,135	0	0	0	0	0	0	0	0	0	0	0	3,135	11
France	0	(s)	(s)	0	573	0	0	0	299	(s)	16	889	889	3
Ghana	0	0	0	0	0	0	0	0	250	0	0	250	250	1
Libera	0	0	0	0	0	0	0	0	1,882	0	0	1,882	1,882	7
Malaysia	0	0	125	0	158	7	0	20	99	0	0	409	409	1
Mexico	179,006	1,819	9,632	3,511	979	308	0	1,097	1,659	300	779	20,082	199,088	727
Netherlands	1,046	(s)	0	378	6,070	196	0	7,163	1,418	340	776	16,340	17,386	63
Netherlands Antilles	0	28	9,306	426	6,397	933	0	2,871	34,487	35	328	54,811	54,811	200
Norway	32,122	(s)	0	0	0	451	0	366	0	0	0	817	32,939	120
Oman	2,109	0	0	0	0	0	0	0	1,239	0	0	1,239	3,347	12
People's Republic of China	3,294	0	494	6,741	1,116	0	0	0	8,731	347	33	8,731	12,025	44
Peru	224	0	755	0	0	223	0	0	4,869	0	(s)	5,847	6,070	22
Puerto Rico	0	0	1,298	0	3,456	453	0	1,081	0	3,256	1,760	11,304	11,304	41
Romania	0	0	252	4,553	2,567	0	0	0	389	423	3,634	11,818	11,818	43
Spain	0	0	218	0	1,167	1,016	0	123	782	12	171	3,488	3,488	13
Trinidad and Tobago	21,978	0	13	0	0	0	0	504	1,731	7	16	2,272	24,250	89
Tunisia	4	0	0	0	0	0	0	0	0	0	0	0	0	(s)
United Kingdom	96,470	526	737	370	2,831	325	0	163	655	156	715	6,477	102,947	376
Virgin Islands	0	0	9,805	0	13,119	5,597	1,882	13,996	36,623	402	339	81,764	81,764	296
Zaire	8,510	0	0	0	0	0	0	0	0	0	0	0	8,510	31
Other Western Hemisphere	721	127	1,699	39	231	0	6	361	6,852	287	162	9,764	10,485	38
Other Eastern Hemisphere	32,093	2	7,135	1,460	9,864	1,553	60	4,883	11,618	1,574	2,154	40,402	40,402	265
Subtotal Other	508,827	48,660	51,504	17,806	60,602	12,403	2,067	46,709	130,206	11,770	17,284	399,010	907,837	3,313

See footnotes at end of table

Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District, January - September 1984  
(continued)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil. Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
All PAD Districts														
Total Imports	925,554	51,300	63,970	20,411	79,416	17,273	2,180	70,474	195,256	16,073	30,748	547,099	1,472,652	5,375
Arab OPEC														
Algeria	14,133	367	0	0	434	327	0	6,082	14,762	218	2,019	24,207	38,341	140
Kuwait	253	0	0	0	0	0	0	0	0	0	0	0	253	1
Saudi Arabia	21,248	917	867	0	0	0	0	0	0	0	(s)	1,784	23,032	84
United Arab Emirates	835	0	0	1,657	357	0	0	411	434	0	1,338	4,197	5,033	18
Subtotal Arab OPEC	36,469	1,284	867	1,657	791	327	0	6,493	15,195	218	3,356	30,189	66,658	243
Other OPEC														
Ecuador	302	0	0	0	0	0	0	0	2,581	0	0	2,581	2,883	11
Gabon	5,063	0	0	0	0	0	0	0	246	60	0	306	5,369	20
Indonesia	18,815	0	228	0	0	0	0	0	1,389	0	0	1,617	20,432	75
Nigeria	17,119	0	0	0	0	0	0	50	539	0	589	589	17,708	65
Venezuela	20,058	0	0	0	14,242	3,730	113	16,774	30,239	0	1,612	66,710	86,767	317
Subtotal Other OPEC	61,357	0	228	0	14,242	3,730	113	16,824	34,994	60	1,612	71,803	133,160	486
Other														
Angola	15,261	0	0	0	0	0	0	0	809	0	0	809	16,070	59
Australia	0	0	0	0	0	0	0	0	746	0	0	746	746	3
Bahamas	0	0	481	0	0	950	69	4,315	6,584	0	180	12,579	12,579	46
Brazil	2	0	0	0	4,987	0	0	0	7,850	0	1	12,838	12,839	47
Canada	9,910	2,247	168	0	2,362	0	50	5,585	4,816	176	2,007	17,410	27,320	100
Congo	3,941	0	0	0	0	0	0	0	1,691	0	0	1,691	5,632	21
Egypt	2,461	0	0	0	573	0	0	0	293	0	1	873	873	3
France	0	(s)	0	0	0	0	0	0	250	0	0	250	250	1
Ghana	0	0	0	0	0	0	0	0	1,882	0	0	1,882	1,882	7
Liberia	0	0	0	0	0	0	0	0	885	291	349	6,477	32,793	120
Mexico	26,316	0	0	3,216	539	279	0	885	918	36	251	15,351	15,352	56
Netherlands	1	(s)	0	219	6,070	196	0	7,163	1,418	0	122	50,361	50,361	184
Netherlands Antilles	0	0	7,178	426	5,108	893	0	2,513	34,121	0	0	456	20,582	75
Norway	20,127	0	0	0	0	89	0	366	0	0	0	585	1,578	6
Oman	993	0	0	0	0	0	0	0	585	0	0	585	1,578	9
People's Republic of China	2,596	0	0	0	0	0	0	0	4,608	0	(s)	4,608	4,609	17
Peru	2	0	1,298	0	3,456	453	0	842	0	1,222	1,660	8,932	8,932	33
Puerto Rico	0	0	252	4,331	2,262	0	0	0	389	183	3,634	11,052	11,052	40
Romania	0	0	0	0	1,167	825	0	123	782	0	153	3,050	3,050	11
Spain	0	0	0	0	0	0	0	504	1,731	7	0	2,255	6,382	23
Trinidad and Tobago	4,126	0	13	0	0	0	0	0	0	0	0	0	0	4
Tunisia	4	0	0	0	0	0	0	0	655	0	287	5,037	54,739	200
United Kingdom	49,702	525	471	79	2,704	154	0	163	555	(s)	0	74,057	74,057	270
Virgin Islands	0	0	4,437	0	13,119	5,597	1,882	13,996	35,025	0	0	0	4,218	15
Zaire	4,218	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Western Hemisphere	0	127	611	0	231	0	0	32	6,852	0	8	7,860	7,860	29
Other Eastern Hemisphere	6,912	2	45	1,226	8,966	627	60	4,582	7,740	459	1,101	24,788	31,699	116
Subtotal Other	146,570	2,900	14,955	9,497	51,545	10,063	2,061	41,050	119,750	2,374	9,753	263,948	410,518	1,498

See footnotes at end of table

Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District, January - September 1984  
(continued)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Prod- ucts 2	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
PAD District I														
Total Imports	244,397	4,184	16,050	11,155	66,579	14,120	2,174	64,366	169,939	2,652	14,721	365,940	610,336	2,228
PAD District II														
Arab OPEC														
Algeria	7,129	0	0	0	0	0	0	0	0	0	0	0	7,129	26
Kuwait	199	0	0	0	0	0	0	0	0	0	0	0	199	1
Saudi Arabia	2,291	0	0	0	0	0	0	0	0	0	0	0	2,291	8
United Arab Emirates	2,069	0	0	0	0	0	0	0	0	0	0	0	2,069	8
Subtotal Arab OPEC	11,689	0	0	0	0	0	0	0	0	0	0	0	11,689	43
Other OPEC														
Ecuador	2,461	0	0	0	0	0	0	0	0	0	0	0	2,461	9
Indonesia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iran	1,556	0	0	0	0	0	0	0	0	0	0	0	1,556	6
Nigeria	7,203	0	203	0	0	0	0	0	0	0	0	203	7,406	27
Venezuela	417	0	0	0	0	0	0	55	0	0	0	55	473	2
Subtotal Other OPEC	11,637	0	203	0	0	0	0	55	0	0	0	259	11,896	43
Other														
Australia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bahamas	0	0	218	0	0	0	0	0	0	0	0	218	218	1
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	65,542	36,659	2,699	75	1,162	0	0	2,360	1,644	3,729	758	49,085	114,626	418
Congo	1,957	0	0	0	0	0	0	0	0	0	0	0	1,957	7
France	0	0	0	0	0	0	0	0	0	0	(s)	0	(s)	(s)
Mexico	34,822	0	0	0	0	0	0	0	0	0	0	0	34,822	127
Netherlands	1,044	0	0	0	0	0	0	0	0	0	0	0	1,044	4
Norway	1,076	0	0	0	0	0	0	0	0	0	0	0	1,076	4
Peru	222	0	0	0	0	0	0	0	0	0	0	0	222	1
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trinidad and Tobago	5,758	0	0	0	0	0	0	0	0	0	0	0	5,758	21
United Kingdom	2,598	1	0	0	0	0	0	0	0	0	0	1	2,600	9
Other Western Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Eastern Hemisphere	1,083	(s)	0	0	0	0	0	0	0	0	0	2	1,085	4
Subtotal Other	114,101	36,661	2,917	75	1,162	0	0	2,360	1,644	3,729	761	49,308	163,409	596
Total Imports	137,428	36,661	3,120	75	1,162	0	0	2,415	1,644	3,729	761	49,566	186,994	682
PAD District III														
Arab OPEC														
Algeria	32,110	0	345	158	0	0	0	50	1,410	2,993	6,821	11,777	43,887	160
Iraq	2,769	0	0	0	0	0	0	0	0	0	0	0	2,769	10
Kuwait	5,098	0	0	0	0	0	0	0	4,019	0	0	4,019	9,117	33
Qatar	1,497	0	0	0	0	0	0	0	0	0	0	0	1,497	5
Saudi Arabia	70,440	0	0	0	0	0	0	0	1,013	0	0	1,013	71,453	261
United Arab Emirates	18,268	0	780	0	0	221	0	0	1,857	0	541	3,399	21,667	79
Subtotal Arab OPEC	130,183	0	1,125	158	0	221	0	50	8,300	2,993	7,362	20,209	150,391	549

See footnotes at end of table.

Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District, January - September 1984  
(continued)

Source	Crude Oil 1	LPG	Unfin-ished Oils	Gasoline Blending Components	Finished Motor Gasoline	Jet Fuel	Kero-sene	Distil Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Prod-ucts 2	Total Prod-ucts	Total Petro-leum	Total (Daily Average)
PAD District III														
Other OPEC														
Ecuador	10,316	0	0	0	0	0	0	0	0	0	0	0	10,316	38
Gabon	10,343	0	0	0	0	0	0	0	0	0	0	0	10,343	38
Indonesia	19,221	1,356	396	0	0	0	0	0	2,580	497	303	5,133	24,354	89
Iran	1,032	0	0	0	0	0	0	0	0	0	0	0	1,032	4
Nigeria	35,125	0	1,379	0	0	0	0	3	326	0	248	1,955	37,080	135
Venezuela	48,369	0	5,686	790	2,290	0	0	0	2,156	68	201	11,191	59,560	217
Subtotal Other OPEC	124,405	1,356	7,461	790	2,290	0	0	3	5,062	565	752	18,279	142,685	521
Other														
Angola	8,892	0	0	0	0	0	0	0	0	0	0	0	8,892	32
Australia	2	0	0	0	0	0	0	0	519	0	164	684	685	3
Bahamas	0	0	6,312	253	0	0	0	349	0	0	2,172	9,086	9,086	33
Bolivia	260	0	0	0	0	0	0	0	0	0	0	0	260	1
Brazil	0	0	0	0	1,386	0	0	0	264	260	23	1,934	1,934	7
Canada	2	0	0	0	0	0	0	0	0	266	71	337	339	1
Congo	3,876	0	0	0	0	0	0	0	0	0	(s)	(s)	3,876	14
Egypt	674	0	0	0	0	0	0	0	0	0	0	0	674	2
France	0	0	(s)	0	0	0	(s)	0	0	0	15	15	15	(s)
Malaysia	0	0	125	0	0	0	0	0	0	0	0	125	125	(s)
Mexico	117,867	1,769	9,632	294	439	29	0	201	688	9	285	13,347	131,214	479
Netherlands	1	0	0	160	0	0	0	0	0	300	525	985	986	4
Netherlands Antilles	0	28	2,120	0	1,289	0	0	358	174	35	86	4,091	4,091	15
Norway	10,920	(s)	0	0	0	361	0	0	0	0	0	361	11,281	41
Oman	1,116	0	0	0	0	0	0	0	654	0	0	654	1,789	6
People's Republic of China	698	0	0	803	0	0	0	0	0	0	30	834	1,531	6
Peru	0	0	755	0	0	223	0	0	262	0	0	1,239	1,239	5
Puerto Rico	0	0	0	0	0	0	0	0	0	2,034	0	2,034	2,034	7
Romania	0	0	0	0	305	0	0	0	0	239	0	544	544	2
Spain	0	0	218	0	0	190	0	0	0	12	18	438	438	2
Trinidad and Tobago	12,094	0	0	0	0	0	0	0	0	0	16	16	12,110	44
Tunisia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United Kingdom	44,170	0	266	291	127	171	0	(s)	0	156	426	1,437	45,608	166
Virgin Islands	0	0	5,367	0	0	0	0	0	1,598	356	339	7,661	7,661	28
Zaire	4,293	0	0	0	0	0	0	0	0	0	0	0	4,293	16
Other Western Hemisphere	721	0	1,088	39	0	0	6	12	0	287	154	1,585	2,307	8
Other Eastern Hemisphere	22,694	0	6,058	18	0	693	0	56	2,324	1,035	183	10,366	33,061	121
Subtotal Other	228,279	1,797	31,942	1,859	3,546	1,668	6	976	6,483	4,989	4,508	57,772	286,052	1,044
Total Imports	482,867	3,152	40,528	2,807	5,836	1,888	6	1,029	19,845	8,547	12,622	96,260	579,128	2,114
PAD District IV														
Other														
Canada	8,642	3,401	0	0	561	0	0	0	1,095	115	4	931	6,107	54
France	0	0	0	0	0	0	0	0	0	0	0	0	14,749	0

See footnotes at end of table

Table 19. Year-to-Date Imports of Crude Oil and Petroleum Products by Source and PAD District, January - September 1984  
(continued)

Source	Crude Oil 1	LPG	Unfin- ished Oils	Gasoline Blending Compo- nents	Finished Motor Gasoline	Jet Fuel	Kero- sene	Distil Fuel Oil	Resid Fuel Oil	Special Naphthas	Other Prod- ucts 2	Total Prod- ucts	Total Petro- leum	Total (Daily Average)
PAD District IV														
Other Eastern Hemisphere	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subtotal Other	8,642	3,401	0	0	561	0	0	1,095	115	4	931	6,107	14,749	54
<b>Total Imports</b>	<b>8,642</b>	<b>3,401</b>	<b>0</b>	<b>0</b>	<b>561</b>	<b>0</b>	<b>0</b>	<b>1,095</b>	<b>115</b>	<b>4</b>	<b>931</b>	<b>6,107</b>	<b>14,749</b>	<b>54</b>
PAD District V														
<b>Arab OPEC</b>														
Algeria	934	0	253	0	0	0	0	0	0	0	0	253	1,187	4
Saudi Arabia	0	0	252	0	0	0	0	0	0	0	0	252	252	1
United Arab Emirates	0	0	269	0	0	0	0	0	0	0	0	269	269	1
Subtotal Arab OPEC	934	0	774	0	0	0	0	0	0	0	0	774	1,707	6
<b>Other OPEC</b>														
Ecuador	360	0	0	0	0	0	0	0	0	0	0	0	360	1
Indonesia	39,069	0	1,808	0	1,244	190	0	340	1,497	467	314	5,860	44,929	164
Venezuela	624	0	0	0	246	403	0	0	0	0	67	716	1,340	5
Subtotal Other OPEC	40,052	0	1,808	0	1,491	593	0	340	1,497	467	381	6,577	46,629	170
<b>Other</b>														
Australia	3,571	427	0	0	585	76	0	167	237	0	44	1,535	5,106	19
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Brunei	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Canada	6,259	3,424	157	0	1,031	216	(s)	211	79	197	52	5,368	11,826	42
France	0	0	0	0	0	0	0	0	0	0	(s)	(s)	(s)	(s)
Malaysia	0	0	0	0	158	7	0	20	99	0	0	284	284	1
Mexico	0	50	0	0	0	0	0	11	53	0	145	259	259	1
Netherlands	0	(s)	0	0	0	0	0	0	0	5	0	5	5	(s)
Netherlands Antilles	0	0	7	0	0	40	0	0	192	0	120	358	358	1
Norway	0	0	0	0	0	0	0	0	0	0	0	0	0	0
People's Republic of China	0	0	494	5,937	1,116	0	0	0	0	347	3	7,897	7,897	29
Puerto Rico	0	0	0	0	0	0	0	239	0	0	100	338	338	1
Romania	0	0	0	222	0	0	0	0	0	0	0	222	222	1
Spain	0	0	0	0	0	0	0	0	0	0	0	0	0	0
United Kingdom	0	0	0	0	0	0	0	0	0	(s)	0	(s)	(s)	(s)
Virgin Islands	0	0	0	0	0	0	0	0	0	46	0	46	46	(s)
Other Western Hemisphere	0	0	0	0	0	0	0	318	0	0	0	318	318	1
Other Eastern Hemisphere	1,404	(s)	1,032	215	898	333	0	264	1,554	81	868	5,245	6,649	24
Subtotal Other	11,234	3,901	1,690	6,374	3,788	671	(s)	1,229	2,214	675	1,332	21,876	33,109	121
<b>Total Imports</b>	<b>52,220</b>	<b>3,901</b>	<b>4,271</b>	<b>6,374</b>	<b>5,279</b>	<b>1,264</b>	<b>(s)</b>	<b>1,569</b>	<b>3,712</b>	<b>1,142</b>	<b>1,713</b>	<b>29,226</b>	<b>81,445</b>	<b>297</b>

1 Includes crude oil imported for storage in the Strategic Petroleum Reserve.

2 Includes aviation gasoline, aviation gasoline, blending components, waxes, asphalt, lubricants, pentanes plus, naphthas less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products (s) = Less than 500 barrels or less than 500 barrels per day

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation

Table 20. Exports of Crude Oil and Petroleum Products by PAD District, September 1984  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) <sup>1</sup>	0	434	(s)	0	4,412	4,846
Natural Gas Liquids	26	13	615	7	126	787
Pentanes Plus	0	1	0	0	0	1
Liquefied Petroleum Gases	26	12	615	7	126	786
Ethane	1	1	0	0	(s)	2
Propane	9	10	537	7	51	614
Normal Butane	16	1	78	0	75	170
Isobutane	0	1	0	0	0	1
Finished Motor Gasoline	8	1	37	0	3	48
Naphtha-Type Jet Fuel	0	0	0	0	0	0
Kerosene-Type Jet Fuel	0	0	(s)	0	27	27
Kerosene	6	0	1	0	(s)	6
Distillate Fuel Oil	109	(s)	461	0	85	655
Residual Fuel Oil	219	0	2,327	0	3,885	6,430
Naphtha < 400 Deg. for Petrochem. Feedstock	35	11	57	1	7	111
Other Oils > 400 Deg. for Petrochem. Feedstock	(s)	17	423	0	208	646
Special Naphthas	4	4	25	0	1	34
Lubricants	64	16	257	2	30	370
Waxes	4	1	27	0	5	37
Petroleum Coke	245	232	2,337	3	3,067	5,884
Asphalt	1	2	(s)	(s)	(s)	4
Miscellaneous Products	14	2	9	0	4	30
Total Product Exports	735	298	6,576	14	7,446	15,069
Total Exports	735	732	6,576	14	11,858	19,915

<sup>1</sup> Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports (s) = Less than 500 barrels or less than 500 barrels per day.  
Note: Total may not equal sum of components due to independent rounding.  
Source: See Explanatory Notes on Data Collection and Estimation

Table 21. Year-to-Date Exports of Crude Oil and Petroleum Products by PAD District, January - September 1984  
(Thousand Barrels)

Commodity	Petroleum Administration for Defense Districts					
	I	II	III	IV	V	Total
Crude Oil (including lease condensate) 1	0	4,377	(s)	0	45,688	50,065
Natural Gas Liquids . . .	344	4,410	6,079	7	1,497	12,337
Pentanes Plus . . .	0	649	0	0	0	649
Liquefied Petroleum Gases . . .	344	3,761	6,079	7	1,497	11,688
Ethane . . .	1	1,298	(s)	0	(s)	1,299
Propane . . .	164	1,103	5,046	7	501	6,921
Normal Butane . . .	179	711	1,032	(s)	896	2,818
Isobutane . . .	0	649	0	0	0	649
Finished Motor Gasoline	144	4	367	0	748	1,263
Naphtha-Type Jet Fuel	(s)	0	200	0	0	200
Kerosene-Type Jet Fuel	176	139	432	0	407	1,154
Kerosene	25	0	3	0	(s)	29
Distillate Fuel Oil	741	56	3,254	0	8,688	12,738
Residual Fuel Oil	1,064	0	16,140	0	29,264	46,468
Naphtha < 400 Deg for Petrochem Feedstock	493	89	964	8	178	1,732
Other Oils > 400 Deg for Petrochem Feedstock	3	253	3,388	0	469	4,114
Special Naphthas	52	76	265	3	251	648
Lubricants	954	238	2,569	12	399	4,172
Waxes	42	7	255	0	33	338
Petroleum Coke . . .	2,024	2,277	27,077	7	22,224	53,609
Asphalt . . .	47	62	28	4	11	153
Miscellaneous Products	137	16	106	1	30	290
Total Product Exports . . .	6,246	7,628	61,129	42	64,202	139,247
Total Exports . . .	6,246	12,005	61,129	42	109,890	189,312

1 Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical

Tracking Systems count these exchanges and shipments as imports and exports

(s) = Less than 500 barrels or less than 500 barrels per day

Note: Total may not equal sum of components due to independent rounding

Sources: See Explanatory Notes on Data Collection and Estimation



Table 22. Exports of Crude Oil and Petroleum Products by Destination, September 1984  
(Thousand Barrels)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt	Other2	Total	Total (Daily Average)
Argentina	0	0	0	0	0	0	(s)	(s)	(s)	(s)	0	1	2	(s)
Australia	0	(s)	0	0	0	0	(s)	14	(s)	56	(s)	12	84	3
Bahamas	0	(s)	1	0	107	0	0	1	0	0	0	1	110	4
Bahrain	0	(s)	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Belgium & Luxembourg	0	0	(s)	0	0	0	2	4	0	677	(s)	(s)	683	23
Brazil	0	2	0	0	0	0	(s)	(s)	(s)	75	0	2	80	3
Cameroon	0	0	0	0	0	0	5	42	0	0	0	0	(s)	(s)
Canada	434	20	7	0	2	90	2	20	3	419	3	52	1,077	36
Chile	0	(s)	0	0	0	0	0	0	(s)	0	0	(s)	22	1
China (Taiwan)	0	0	0	0	0	0	0	9	(s)	89	(s)	1	99	3
Colombia	0	0	0	0	0	0	(s)	18	(s)	0	0	2	21	1
Costa Rica	0	0	0	0	0	0	(s)	3	(s)	0	0	(s)	3	(s)
Denmark	0	1	0	0	0	0	0	(s)	(s)	0	0	(s)	2	(s)
Dominican Republic	0	46	0	0	0	0	0	1	0	0	0	(s)	47	2
Ecuador	0	0	0	0	0	0	(s)	(s)	(s)	0	0	1	1	(s)
Egypt	0	0	0	0	0	0	(s)	4	(s)	0	0	1	5	(s)
El Salvador	0	0	0	0	0	0	(s)	3	0	0	0	1	4	(s)
Finland	0	(s)	0	0	0	0	(s)	(s)	0	0	0	(s)	(s)	(s)
France	0	0	0	0	0	219	(s)	1	1	0	0	201	422	14
French Pacific Isl.	0	(s)	0	0	141	0	0	0	0	0	0	0	(s)	(s)
Ghana	0	0	0	0	0	0	0	0	0	0	0	0	141	5
Greece	0	0	0	0	0	0	0	(s)	0	0	0	0	(s)	(s)
Guatemala	0	67	0	0	0	0	0	3	0	0	0	0	70	2
Honduras	0	(s)	0	0	0	0	(s)	8	0	0	0	(s)	8	(s)
Hong Kong	0	0	0	0	0	516	0	2	(s)	0	(s)	0	519	17
India	0	0	0	0	0	0	0	23	(s)	0	0	0	23	1
Indonesia	0	(s)	0	0	(s)	0	0	1	0	0	0	2	3	(s)
Iran	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Israel	0	0	0	0	(s)	0	(s)	(s)	0	(s)	0	(s)	(s)	(s)
Italy	0	(s)	0	0	0	320	(s)	(s)	(s)	648	0	84	1,053	35
Ivory Coast	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Jamaica	(s)	30	0	0	0	189	(s)	33	(s)	0	0	(s)	253	8
Japan	0	1	0	0	0	1,073	2	9	2	1,756	(s)	46	2,889	96
Jordan	0	0	0	0	0	994	(s)	2	1	0	0	96	1,093	36
Korea, Republic of	0	0	0	0	0	0	0	2	1	1	(s)	0	1	(s)
Kuwait	0	0	0	0	0	0	0	1	0	0	0	(s)	1	(s)
Lebanon	0	0	0	0	0	0	0	1	0	0	0	(s)	1	(s)
Libena	0	0	0	0	0	114	0	0	0	0	0	0	114	4
Malaysia	0	(s)	0	0	0	0	0	1	0	0	(s)	(s)	1	(s)
Mexico	0	520	3	27	0	303	1	57	6	9	0	7	934	31
Netherlands	0	(s)	0	0	(s)	340	9	8	(s)	1,690	0	1	2,049	68
Netherlands Antilles	0	0	36	0	177	673	(s)	(s)	0	0	0	(s)	887	30
New Zealand	0	0	0	0	0	0	(s)	(s)	(s)	0	0	1	1	(s)
Nicaragua	0	12	0	0	0	0	0	(s)	0	0	0	0	12	(s)
Nigeria	0	0	0	0	0	0	0	(s)	0	0	(s)	(s)	(s)	(s)
Norway	0	0	0	0	0	0	0	(s)	0	123	0	0	123	4
Pacific Trust Terr	0	0	0	0	0	0	0	(s)	0	0	0	(s)	(s)	(s)
Panama	0	24	0	0	85	0	3	12	0	0	0	(s)	124	4
Peru	0	38	0	0	0	0	(s)	1	(s)	1	(s)	(s)	40	1
Philippines	0	0	0	0	0	0	(s)	1	(s)	0	0	(s)	56	2
Puerto Rico	0	0	(s)	0	0	0	(s)	14	2	0	(s)	13	41	1
Rep. of South Africa	0	10	0	0	0	(s)	0	17	15	0	(s)	142	175	6
Saudi Arabia	0	2	0	0	0	0	0	3	0	0	0	1	6	(s)

See footnotes at end of table

Table 22. Exports of Crude Oil and Petroleum Products by Destination, September 1984  
(Thousand Barrels)  
(continued)

Destination	Crude Oil <sup>1</sup>	LPG	Finished Motor Gasoline	Jet Fuel	Dist Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt	Other <sup>2</sup>	Total	Total (Daily Average)
Singapore	0	(s)	0	0	0	0	4	4	(s)	0	(s)	(s)	9	(s)
Spain	0	(s)	0	0	142	557	0	(s)	(s)	92	(s)	(s)	791	26
Surinam	0	0	0	0	0	0	0	(s)	0	13	0	0	13	(s)
Sweden	0	0	0	0	0	0	0	2	(s)	0	0	0	2	(s)
Switzerland	0	0	0	0	0	0	0	(s)	(s)	0	0	(s)	1	(s)
Thailand	0	(s)	0	0	0	0	0	5	(s)	0	0	58	63	2
Trinidad and Tobago	0	2	0	0	0	0	0	4	0	0	0	(s)	6	(s)
Turkey	0	0	0	0	0	0	0	5	0	0	0	(s)	5	(s)
United Arab Emirates	0	0	0	0	0	0	0	13	0	76	(s)	(s)	89	3
United Kingdom	0	1	0	0	(s)	97	0	2	(s)	0	0	1	102	3
Uruguay	0	0	0	0	0	0	0	(s)	0	0	(s)	(s)	(s)	(s)
Venezuela	0	(s)	(s)	0	0	0	2	1	(s)	29	0	3	36	1
Virgin Islands	3,061	0	0	0	0	674	0	0	0	0	0	0	3,735	125
West Germany	0	(s)	0	0	0	0	0	2	(s)	27	(s)	3	32	1
Yugoslavia	0	0	0	0	0	0	0	(s)	0	99	0	0	99	3
Other	1,351	6	(s)	0	0	270	(s)	11	2	3	(s)	2	1,644	55
Total	4,846	786	48	27	655	6,430	34	370	37	5,884	4	793	19,915	664

<sup>1</sup> Exports of crude oil are prohibited by law. However, some crude oil is exchanged with Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical Tracking Systems count these exchanges and shipments as imports and exports.

<sup>2</sup> Includes pentanes plus, kerosene, naphtha less than 400 degrees F, other oils greater than 400 degrees F, and miscellaneous products.

(s) = Less than 500 barrels or less than 500 barrels per day.

Note: Total may not equal sum of components due to independent rounding.  
Source: See Explanatory Notes on Data Collection and Estimation.

Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - September 1984  
(Thousand Barrels)

Destination	Crude Oil	LPG	Finished Motor Gasoline	Jet Fuel	Dist. Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt	Other <sup>2</sup>	Total	Total (Daily Average)
Argentina	0	1	0	431	(s)	0	4	111	3	1	0	161	710	3
Australia	0	6	269	0	1	800	32	58	1	1,294	1	103	2,564	9
Bahamas	0	72	0	(s)	862	859	0	13	(s)	0	0	3	1,817	7
Bahrain	0	(s)	0	0	(s)	0	(s)	1	0	276	0	1	279	1
Belgium & Luxembourg	0	10	(s)	0	0	0	5	74	1	6,057	(s)	5	6,152	22
Brazil	0	4	0	0	0	0	8	10	(s)	335	0	12	368	1
Cameroon	0	0	0	0	0	0	0	(s)	(s)	121	0	(s)	121	(s)
Canada	4,377	3,783	138	220	2,350	1,883	94	569	25	4,305	108	1,221	19,073	70
Chile	0	(s)	83	43	256	61	3	97	(s)	183	2	5	553	2
China (Taiwan)	0	2	0	0	920	3,770	1	88	1	10	1	10	4,976	18
Colombia	0	4	0	0	0	0	5	50	61	1	0	10	130	(s)
Costa Rica	0	49	(s)	0	0	0	17	38	1	22	10	8	144	1
Denmark	0	2	0	0	(s)	0	0	2	1	513	0	1	520	2
Dominican Republic	0	305	0	0	0	0	(s)	8	1	64	0	4	382	1
Ecuador	0	351	25	0	332	(s)	3	7	2	0	2	8	729	3
Egypt	0	1	0	0	(s)	0	(s)	18	(s)	0	0	2	22	(s)
El Salvador	0	1	0	0	0	0	0	33	(s)	0	0	4	39	(s)
Finland	0	0	0	0	0	0	0	4	(s)	0	0	2	6	(s)
France	0	38	1	0	1	1,109	0	10	13	3,920	0	1,007	6,100	22
French Pacific Isl.	0	(s)	0	0	0	350	0	2	0	0	0	(s)	352	1
Ghana	0	0	0	0	141	0	0	(s)	0	0	0	(s)	141	1
Greece	0	5	0	0	(s)	0	0	2	(s)	230	0	2	239	1
Guatemala	0	483	0	0	0	0	4	30	0	0	(s)	5	525	2
Guinea	0	(s)	0	0	0	358	(s)	6	0	0	0	(s)	365	1
Honduras	0	3	(s)	0	0	0	5	46	(s)	(s)	(s)	3	57	(s)
Hong Kong	0	1	0	0	(s)	1,910	2	12	(s)	38	1	5	1,932	7
India	0	(s)	0	0	(s)	0	0	53	(s)	266	(s)	27	119	(s)
Indonesia	0	1	0	0	1	0	(s)	26	(s)	0	(s)	11	305	1
Iran	0	0	0	0	0	0	1	1	0	0	0	0	1	(s)
Israel	0	7	0	0	(s)	0	2	1	(s)	(s)	0	9	20	(s)
Italy	0	159	0	0	(s)	3,610	6	6	4	6,466	(s)	1,106	11,357	41
Ivory Coast	0	0	0	0	174	280	0	27	0	0	1	(s)	481	2
Jamaica	(s)	209	25	0	0	520	(s)	107	(s)	0	(s)	8	870	3
Japan	0	18	(s)	0	2,860	9,297	310	186	21	11,736	(s)	367	24,795	90
Jordan	0	(s)	0	0	0	0	(s)	6	0	(s)	0	(s)	7	(s)
Korea, Republic of	0	6	0	0	668	2,572	3	39	3	769	(s)	324	4,385	16
Kuwait	0	3	(s)	0	0	0	(s)	14	0	(s)	0	1	19	(s)
Lebanon	0	0	0	0	0	0	0	7	0	0	(s)	(s)	7	(s)
Liberia	0	1	0	0	0	365	0	2	(s)	0	(s)	(s)	367	1
Malaysia	0	(s)	0	0	(s)	0	(s)	0	0	0	(s)	1	8	(s)
Mexico	0	4,928	38	327	(s)	908	21	574	64	284	1	107	7,250	26
Netherlands	0	144	0	0	(s)	917	55	58	4	7,102	(s)	600	8,879	32
Netherlands Antilles	0	4	87	128	1,191	3,808	(s)	3	0	0	0	(s)	5,220	19
New Zealand	0	(s)	443	0	301	0	0	10	(s)	388	(s)	7	1,154	4
Nicaragua	0	12	0	0	0	0	3	24	0	0	0	3	42	(s)
Nigeria	0	(s)	0	0	0	0	(s)	112	(s)	0	(s)	3	117	(s)
Norway	0	(s)	0	0	(s)	0	0	2	(s)	912	(s)	1	915	3
Pacific Trust Terr.	0	1	0	0	0	0	0	(s)	0	0	0	(s)	1	(s)
Panama	0	112	113	0	1,317	1,236	6	54	(s)	28	(s)	3	2,871	10
Peru	0	41	0	0	576	0	(s)	94	(s)	1	(s)	2	715	3
Philippines	0	4	0	0	0	0	2	11	(s)	0	0	114	132	(s)
Puerto Rico	6,944	93	2	(s)	(s)	202	12	148	14	(s)	1	180	7,595	28
Rep. of South Africa	0	2	0	0	(s)	0	(s)	86	72	281	1	431	874	3

See footnotes at end of table.

Table 23. Year-to-Date Exports of Crude Oil and Petroleum Products by Destination, January - September 1984  
(Thousand Barrels)  
(continued)

Destination	Crude Oil 1	LPG	Finished Motor Gasoline	Jet Fuel	Dist Fuel Oil	Residual Fuel Oil	Special Naphthas	Lubricants	Waxes	Petroleum Coke	Asphalt	Other <sup>2</sup>	Total	Total (Daily Average)
Saudi Arabia	0	65	0	0	0	(s)	1	140	(s)	1	0	25	231	1
Singapore	0	12	0	0	100	2,708	22	68	1	23	(s)	11	2,944	11
Spain	0	4	0	0	523	2,025	0	379	1	4,619	(s)	254	7,806	28
Sunnam	0	0	0	0	0	0	0	11	0	58	0	1	70	(s)
Sweden	0	3	0	0	0	0	0	12	1	315	(s)	5	336	1
Switzerland	0	3	0	0	0	0	(s)	5	1	(s)	0	4	13	(s)
Thailand	0	(s)	30	0	0	0	1	43	(s)	(s)	(s)	121	196	1
Trinidad and Tobago	0	43	0	206	(s)	0	5	15	(s)	302	0	3	272	1
Turkey	0	(s)	0	0	(s)	0	(s)	6	(s)	257	0	174	483	2
United Arab Emirates	0	1	0	0	(s)	0	(s)	70	0	95	(s)	23	352	1
United Kingdom	0	46	(s)	0	8	1,478	1	41	3	237	15	24	1,711	6
U.S.S.R.	0	0	0	0	0	0	0	268	0	237	0	(s)	505	2
Uruguay	0	(s)	0	0	0	0	(s)	6	(s)	0	(s)	2	8	(s)
Venezuela	(s)	525	(s)	0	(s)	(s)	9	13	3	588	1	19	1,159	4
Virgin Islands	30,863	14	0	0	0	4,821	0	(s)	0	0	0	(s)	25,499	130
West Germany	0	(s)	0	0	0	0	(s)	75	25	897	(s)	98	1,094	4
Yugoslavia	0	0	0	0	0	0	0	(s)	(s)	440	0	(s)	440	2
Other	7,881	105	(s)	0	151	823	(s)	70	(s)	186	4	163	9,385	34
Total	50,065	11,583	1,253	1,354	12,738	46,468	648	4,172	338	53,609	153	6,814	189,312	691

<sup>1</sup> Exports of crude oil are prohibited by law. However, some crude oil is exchanged with

Canada on a barrel for barrel basis, and crude oil is shipped to U.S. Territories (especially Puerto Rico and the Virgin Islands) to be refined there. The Statistical

Tracking Systems count these exchanges and shipments as imports and exports

<sup>2</sup> Includes pentanes plus, kerosene, naphtha less than 400 degrees F, other oils greater than 400 degrees F and miscellaneous products

(s) = Less than 500 barrels or less than 500 barrels per day

Note: Total may not equal sum of components due to independent rounding.

Sources: See Explanatory Notes on Data Collection and Estimation

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1984  
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No La. Ark	New Mexico	Total		Rocky Mt	Dist V West Coast
Crude Oil (incl. lease condensate)																	
Refinery	—	—	10,982	—	—	—	—	13,359	—	—	—	—	—	47,938	2,141	20,688	95,108
Tank Farms and Pipelines	—	—	1,370	—	—	—	—	55,270	—	—	—	—	—	89,787	9,919	24,862	181,208
Leases	—	—	60	—	—	—	—	1,589	—	—	—	—	—	16,844	1,273	1,320	21,086
Strategic Petroleum Reserve <sup>1</sup>	—	—	0	—	—	—	—	0	—	—	—	—	—	431,069	0	0	431,069
Alaskan In-Transit	—	—	0	—	—	—	—	0	—	—	—	—	—	0	0	27,929	27,929
Total	—	—	12,412	—	—	—	—	70,218	—	—	—	—	—	585,638	13,333	74,799	756,400
Total Stocks, All Oils (excl. Crude Oil)																	
Refinery	35,730	2,719	38,449	857	41,320	6,183	16,460	64,820	10,284	75,644	46,421	5,472	1,348	139,179	11,009	59,331	312,788
Bulk Terminal	—	—	119,691	—	—	—	—	86,905	—	—	—	—	—	90,895	3,042	22,626	323,159
Pipeline	—	—	28,995	—	—	—	—	35,850	—	—	—	—	—	41,313	2,581	4,441	113,180
Natural Gas Processing Plant	237	51	288	0	561	46	1,095	1,802	1,512	3,883	437	63	273	6,168	213	184	8,655
Total	—	—	187,423	—	—	—	—	189,377	—	—	—	—	—	277,555	16,845	86,582	757,782
Pentanes Plus																	
Refinery	13	0	13	0	36	80	152	268	102	249	132	16	7	506	21	17	825
Bulk Terminal	—	—	23	—	—	—	—	1,861	—	—	—	—	—	3,583	1	0	5,468
Pipeline	—	—	0	—	—	—	—	404	—	—	—	—	—	1,354	158	5	1,921
Natural Gas Processing Plant	4	8	12	0	42	16	261	319	436	519	138	20	41	1,154	86	30	1,601
Total	—	—	48	—	—	—	—	2,852	—	—	—	—	—	6,597	266	52	9,815
Liquefied Petroleum Gases																	
Refinery	887	11	898	241	2,497	153	714	3,605	221	1,065	1,891	50	27	3,054	354	736	8,647
Bulk Terminal	—	—	1,366	—	—	—	—	22,392	—	—	—	—	—	60,076	118	1,953	85,905
Pipeline	—	—	1,642	—	—	—	—	6,165	—	—	—	—	—	5,629	421	0	13,857
Natural Gas Processing Plant	233	43	275	0	616	30	834	1,480	910	3,363	299	41	232	4,845	127	154	6,882
Total	—	—	4,182	—	—	—	—	33,642	—	—	—	—	—	73,604	1,020	2,843	115,291
Ethane																	
Refinery	26	0	26	0	1	10	0	11	0	8	0	0	0	8	0	0	45
Bulk Terminal	—	—	0	—	—	—	—	2,639	—	—	—	—	—	13,029	0	0	15,668
Pipeline	—	—	0	—	—	—	—	1,307	—	—	—	—	—	1,942	128	0	3,377
Natural Gas Processing Plant	0	0	0	0	23	0	212	235	59	924	0	1	7	991	2	0	1,228
Total	—	—	26	—	—	—	—	4,192	—	—	—	—	—	15,970	130	0	20,318

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1984  
(Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II							PAD District III				PAD District IV			United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No. Ark.	New Mexico	Total	Rocky Mt.	Dist V		
Motor Gasoline Blending Components																		
Refinery	5,303	98	5,401	30	5,306	701	1,818	7,855	1,358	9,727	5,934	130	294	17,443	1,533	6,908	39,140	
Bulk Terminal	--	--	27	--	--	--	--	130	--	--	--	--	--	600	1	199	957	
Pipeline	--	--	0	--	--	--	--	18	--	--	--	--	--	0	0	0	18	
Total	--	--	5,428	--	--	--	--	8,003	--	--	--	--	--	18,043	1,534	7,107	40,115	
Aviation Gasoline Blending Components																		
Refinery	0	0	0	0	59	0	36	95	0	10	181	0	0	191	0	30	316	
Total	--	--	0	--	--	--	--	95	--	--	--	--	--	191	0	30	316	
Total Finished Motor Gasoline																		
Refinery	5,359	234	5,593	110	5,866	1,017	3,098	10,091	2,179	10,375	5,200	1,071	213	19,038	1,938	7,316	43,976	
Bulk Terminal	--	--	39,435	--	--	--	--	31,525	--	--	--	--	--	13,433	1,678	10,545	96,816	
Pipeline	--	--	14,443	--	--	--	--	17,300	--	--	--	--	--	19,254	1,083	1,788	53,868	
Total	--	--	59,471	--	--	--	--	58,916	--	--	--	--	--	51,725	4,699	19,649	194,460	
Finished Leaded Motor Gasoline																		
Refinery	2,350	119	2,469	75	2,437	530	1,737	4,779	1,269	4,627	2,066	530	107	8,599	1,105	2,887	19,839	
Bulk Terminal	--	--	18,017	--	--	--	--	15,604	--	--	--	--	--	5,855	964	5,164	45,804	
Pipeline	--	--	5,227	--	--	--	--	7,965	--	--	--	--	--	7,943	628	708	22,471	
Total	--	--	25,713	--	--	--	--	28,348	--	--	--	--	--	22,397	2,697	8,759	87,914	
Finished Unleaded Motor Gasoline																		
Refinery	3,009	115	3,124	35	3,429	487	1,361	5,312	910	5,748	3,134	541	106	10,439	833	4,429	24,137	
Bulk Terminal	--	--	21,418	--	--	--	--	15,921	--	--	--	--	--	7,578	714	5,381	51,012	
Pipeline	--	--	9,216	--	--	--	--	9,335	--	--	--	--	--	11,311	455	1,080	31,397	
Total	--	--	33,758	--	--	--	--	30,568	--	--	--	--	--	29,328	2,002	10,890	106,546	
Finished Aviation Gasoline																		
Refinery	46	0	46	0	97	0	13	110	77	305	143	0	0	525	40	256	977	
Bulk Terminal	--	--	324	--	--	--	--	418	--	--	--	--	--	106	10	368	1,226	
Pipeline	--	--	12	--	--	--	--	81	--	--	--	--	--	15	0	20	128	
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	88	0	0	0	0	88	0	0	88	
Total	--	--	382	--	--	--	--	609	--	--	--	--	--	734	50	644	2,419	

See footnotes at end of table.

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1984  
(Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV		United States	
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La Gulf Coast	No La., Ark.	New Mexico	Total	Rocky Mt.		Dist. V
Propane for Petrochemical Feedstock Use																	
Refinery	67	0	67	0	100	0	2	102	4	8	140	0	0	152	0	0	321
Total	67	0	67	0	100	0	2	102	4	8	140	0	0	152	0	0	321
Propane For Other Uses																	
Refinery	742	6	748	1	1,600	26	225	1,852	68	84	1,101	4	3	1,260	178	303	4,341
Bulk Terminal	—	—	1,112	—	—	—	—	15,897	—	—	—	—	—	30,734	117	552	48,412
Pipeline	—	—	1,519	—	—	—	—	3,510	—	—	—	—	—	2,565	170	0	7,764
Natural Gas Processing Plant	206	42	248	0	476	18	418	912	501	1,051	166	18	128	1,864	82	136	3,242
Total	—	—	3,627	—	—	—	—	22,171	—	—	—	—	—	36,423	547	991	63,759
Normal Butane For Petro. Feed Use																	
Refinery	0	0	0	0	0	29	0	29	0	7	0	1	0	8	5	2	44
Total	—	—	0	—	—	—	—	29	—	—	—	—	—	8	5	2	44
Normal Butane For Other Uses																	
Refinery	52	5	57	212	539	52	339	1,142	91	784	205	26	16	1,122	117	413	2,851
Bulk Terminal	—	—	234	—	—	—	—	2,789	—	—	—	—	—	11,011	1	1,188	15,223
Pipeline	—	—	123	—	—	—	—	833	—	—	—	—	—	726	81	0	1,763
Natural Gas Processing Plant	26	0	26	0	84	10	147	241	283	901	83	14	83	1,364	38	12	1,681
Total	—	—	440	—	—	—	—	5,005	—	—	—	—	—	14,223	237	1,613	21,518
Isobutane																	
Refinery	0	0	0	28	257	36	148	469	58	174	245	19	8	504	54	18	1,045
Bulk Terminal	—	—	20	—	—	—	—	1,067	—	—	—	—	—	5,302	0	213	6,602
Pipeline	—	—	0	—	—	—	—	515	—	—	—	—	—	396	42	0	953
Natural Gas Processing Plant	1	1	2	0	33	2	57	92	67	487	50	8	14	626	5	6	731
Total	—	—	22	—	—	—	—	2,143	—	—	—	—	—	6,828	101	237	9,331
Other Hydrocarbons and Alcohol																	
Refinery	117	0	117	0	119	0	1	120	1	88	2	0	0	91	0	6	334
Total	—	—	117	—	—	—	—	120	—	—	—	—	—	91	0	6	334
Unfinished Oils																	
Refinery	9,236	121	3,357	46	2,857	137	1,055	4,095	681	7,590	5,511	241	38	14,061	388	4,982	26,883
Naphtha and Lighter	2,411	4	2,415	0	2,159	4	552	2,715	806	6,537	2,387	57	40	9,827	630	3,516	19,103
Kerosene and Lighter Gas Oils	5,076	287	5,363	113	5,443	245	1,731	7,532	962	9,773	7,735	387	136	18,993	972	11,124	43,984
Heavy Gas Oils	1,037	272	1,309	2	2,823	4	1,311	4,140	489	3,378	3,425	58	0	7,350	702	5,000	18,501
Residuum	11,760	684	12,444	161	13,282	390	4,649	16,482	2,938	27,278	19,058	743	214	50,231	2,692	24,622	108,471
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

See footnotes at end of table

Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1984  
(Thousand Barrels) (continued)

Commodity	PAD District I			PAD District II					PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Dak.	Okla., Kans., Mo.	Texas Inland	Texas Gulf Coast	La Gulf Coast	No La., Ark	New Mexico	Total	Rocky Mt		Dist IV	PAD Dist V
Naphtha-Type Jet Fuel																	
Refinery	121	25	146	0	421	91	145	657	434	960	409	153	2,080	215	752	3,850	
Bulk Terminal	—	—	500	—	—	—	—	651	—	—	—	—	156	13	505	1,825	
Pipeline	—	—	175	—	—	—	—	158	—	—	—	—	478	128	402	1,341	
Total	—	—	821	—	—	—	—	1,466	—	—	—	—	2,714	356	1,659	7,016	
Kerosene-Type Jet Fuel																	
Refinery	1,027	0	1,027	39	1,339	190	303	1,871	412	3,108	2,944	9	74	370	2,883	12,698	
Bulk Terminal	—	—	4,284	—	—	—	—	5,392	—	—	—	—	1,919	205	1,747	13,547	
Pipeline	—	—	4,130	—	—	—	—	2,612	—	—	—	—	4,401	189	631	11,963	
Total	—	—	9,441	—	—	—	—	9,875	—	—	—	—	12,867	764	5,261	38,208	
Kerosene																	
Refinery	230	99	329	0	535	33	371	939	66	536	556	83	14	1,255	0	197	
Bulk Terminal	—	—	3,356	—	—	—	—	1,300	—	—	—	—	711	31	29	5,427	
Pipeline	—	—	182	—	—	—	—	178	—	—	—	—	480	0	0	840	
Natural Gas Processing Plant	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	2	
Total	—	—	3,867	—	—	—	—	2,417	—	—	—	—	2,448	31	226	8,969	
Distillate Fuel Oils																	
Refinery	5,130	399	5,529	88	6,289	1,679	3,260	11,316	1,138	10,032	4,109	1,330	177	16,786	1,938	40,749	
Bulk Terminal	—	—	43,614	—	—	—	—	18,494	—	—	—	—	—	6,303	806	73,868	
Pipeline	—	—	8,406	—	—	—	—	8,800	—	—	—	—	—	9,437	602	28,596	
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	
Total	—	—	57,549	—	—	—	—	38,610	—	—	—	—	—	32,527	3,346	143,214	
Residual Fuel Oils																	
Refinery	2,113	67	2,180	39	1,510	319	188	2,056	394	4,067	2,194	147	16	6,818	539	17,860	
Bulk Terminal	—	—	22,824	—	—	—	—	1,441	—	—	—	—	—	3,020	0	28,965	
Pipeline	—	—	5	—	—	—	—	0	—	—	—	—	—	0	141	146	
Total	—	—	25,009	—	—	—	—	3,497	—	—	—	—	—	9,838	539	46,971	
Naphtha < 400 Deg. Petro. Feedstock																	
Refinery	264	0	264	0	92	0	61	153	76	757	475	46	0	1,354	0	1,850	
Total	264	0	264	0	92	0	61	153	76	757	475	46	0	1,354	0	1,850	
Other Oils > 400 Deg. Petro. Feedstock																	
Refinery	4	0	4	0	27	0	0	27	315	992	180	0	0	1,487	7	1,609	
Total	4	0	4	0	27	0	0	27	315	992	180	0	0	1,487	7	1,609	

See footnotes at end of table.



Table 24. Stocks of Crude Oil and Petroleum Products by PAD District, September 30, 1984  
(Thousand Barrels) (continued)

Commodity	PAD District I				PAD District II				PAD District III				PAD District IV		United States		
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky.	Minn., Wisc., Dak.	Okla., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La. Gulf Coast	No La., Ark.	New Mexico	Total		Rocky Mt.	Dist. V West Coast
<b>Special Naphthas</b>																	
Refinery	18	31	49	0	136	0	160	296	24	1,190	100	120	0	1,434	9	223	2,011
Bulk Terminal	—	—	562	—	—	—	—	142	—	—	—	—	—	34	0	28	766
Natural Gas Processing Plant	0	0	0	0	0	0	0	0	64	0	0	0	0	64	0	0	64
Total	—	—	611	—	—	—	—	438	—	—	—	—	—	1,532	9	251	2,841
<b>Lubricants</b>																	
Refinery	1,115	898	2,013	0	830	0	573	1,403	29	3,573	1,647	597	0	5,846	67	429	9,758
Bulk Terminal	—	—	1,172	—	—	—	—	886	—	—	—	—	—	267	2	635	2,762
Total	—	—	3,185	—	—	—	—	2,089	—	—	—	—	—	6,113	69	1,064	12,520
<b>Waxes</b>																	
Refinery	0	82	82	0	30	0	42	72	13	224	119	48	0	404	12	39	609
Total	—	—	82	—	—	—	—	72	—	—	—	—	—	404	12	39	609
<b>Petroleum Coke</b>																	
Refinery	865	0	865	0	350	288	132	770	0	394	898	206	0	1,498	169	1,655	4,957
Total	865	0	865	0	350	288	132	770	0	394	898	206	0	1,498	169	1,655	4,957
<b>Asphalt and Road Oil</b>																	
Refinery	1,217	72	1,289	148	2,391	1,238	734	4,511	486	324	419	668	186	2,085	1,084	1,508	10,477
Bulk Terminal	—	—	2,150	—	—	—	—	2,442	—	—	—	—	—	500	174	160	5,426
Total	—	—	3,439	—	—	—	—	6,953	—	—	—	—	—	2,585	1,258	1,668	15,903
<b>Miscellaneous Products</b>																	
Refinery	141	19	160	1	108	4	10	123	31	390	30	55	0	506	21	144	954
Bulk Terminal	—	—	54	—	—	—	—	31	—	—	—	—	—	187	3	126	401
Pipeline	—	—	0	—	—	—	—	134	—	—	—	—	—	265	0	103	502
Natural Gas Processing Plant	0	0	0	0	3	0	0	3	12	0	0	2	0	14	0	0	17
Total	—	—	214	—	—	—	—	291	—	—	—	—	—	972	24	373	1,874
<b>Total Stocks, All Oils</b>																	
	—	—	199,835	—	—	—	—	259,595	—	—	—	—	—	863,193	30,178	161,381	1,514,182

<sup>1</sup> Includes 33,879 thousand barrels of domestic crude oil  
Source: See Explanatory Notes on Data Collection and Estimation  
— Not Applicable

Table 25. Refinery and Bulk Terminal Stocks of Selected Petroleum Products by State, September 30, 1984  
(Thousand Barrels)

State	Leaded Motor Gasoline	Unleaded Motor Gasoline	Kerosene	Distillate Fuel Oil	Residual Fuel Oil
<b>PAD District I Total</b>	<b>20,486</b>	<b>24,542</b>	<b>3,685</b>	<b>49,143</b>	<b>25,004</b>
Connecticut	666	669	117	2,358	376
Delaware, D C, Maryland	948	1,620	162	3,713	3,211
Florida	2,065	3,064	262	1,940	969
Georgia	1,358	1,539	113	1,502	546
Maine	352	546	53	1,586	797
Massachusetts	1,124	1,182	71	3,746	872
New Hampshire, Vermont	82	72	w	652	292
New Jersey	2,981	3,780	684	12,298	9,723
New York	3,822	2,986	542	8,122	3,234
North Carolina	1,397	1,558	484	1,804	559
Pennsylvania	2,700	3,920	684	5,639	2,429
Rhode Island	244	531	w	1,667	160
South Carolina	827	1,048	128	1,315	580
Virginia	1,702	1,787	280	2,520	1,215
West Virginia	218	240	33	281	41
<b>PAD District II Total</b>	<b>20,383</b>	<b>21,233</b>	<b>2,239</b>	<b>29,810</b>	<b>3,497</b>
Illinois	3,812	4,396	289	5,569	824
Indiana	2,585	3,255	397	4,850	533
Iowa	693	889	w	1,076	w
Kansas	1,540	1,429	28	1,990	76
Kentucky	1,098	1,267	207	1,381	175
Michigan	1,984	2,008	222	2,856	382
Minnesota	1,058	773	w	1,598	303
Missouri	771	643	w	745	w
Nebraska	395	258	0	239	0
North & South Dakota	390	372	0	943	w
Ohio	2,512	2,693	592	3,303	437
Oklahoma	1,315	1,076	349	2,397	144
Tennessee	1,106	1,325	81	1,027	184
Texas	1,124	1,049	w	1,836	169
<b>PAD District III Total</b>	<b>14,454</b>	<b>18,017</b>	<b>1,966</b>	<b>23,089</b>	<b>9,838</b>
Alabama	856	897	107	1,025	631
Arkansas	274	221	w	259	41
Louisiana	1,805	3,210	561	4,278	3,116
Mississippi	1,432	1,529	23	1,759	459
New Mexico	261	238	w	263	16
Texas	9,826	11,922	1,257	15,505	5,575
<b>PAD District IV Total</b>	<b>2,069</b>	<b>1,547</b>	<b>31</b>	<b>2,744</b>	<b>539</b>
Colorado	565	506	0	437	144
Idaho	150	67	0	172	0
Montana	615	355	w	815	90
Utah	349	219	0	534	174
Wyoming	390	400	w	786	131
<b>PAD District V Total</b>	<b>8,051</b>	<b>9,810</b>	<b>226</b>	<b>9,831</b>	<b>7,947</b>
Alaska	484	236	w	1,126	w
Arizona	439	373	w	233	0
California	4,498	6,574	113	5,229	5,702
Hawaii	245	242	0	279	w
Nevada	182	249	w	94	w
Oregon	624	568	w	779	285
Washington	1,579	1,568	w	2,091	1,136
<b>United States Total</b>	<b>65,443</b>	<b>75,149</b>	<b>8,147</b>	<b>114,617</b>	<b>46,825</b>

w = Withheld to avoid disclosure of individual company data  
Source See Explanatory Notes on Data Collection and Estimation

Table 26. Movements of Crude Oil and Petroleum Products by Pipeline, Tanker, and Barge between PAD Districts, September 1984  
(Thousand Barrels)

Commodity	From I to			From II to					From III to					From IV to					From V to													
	II	III	V	I	III	IV	V	I	II	IV	V	II	III	V	I	II	III	V	I	II	III	V	I	II	III	V	I	II	III	V		
Crude Oil (Tanker and Barge only)	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Petroleum Products	8,873	196	0	3,175	8,902	2,199	0	75,043	31,768	0	1,543	1,823	756	976	0	1,876	0	16,861	0	0	0	0	0	0	0	0	0	0	0	0	0	
Pentanes Plus	0	0	0	0	0	0	0	0	1,318	0	0	128	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	
Liquefied Petroleum Gases	0	0	0	1,158	5,356	71	0	1,865	7,444	0	0	701	642	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Unfinished Oils	10	0	0	0	0	0	0	406	334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Motor Gasoline Blending Components	0	0	0	0	0	0	0	174	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Finished Motor Gasoline	6,029	0	0	1,229	1,778	1,352	0	43,938	14,775	0	849	571	636	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Leaded Motor Gasoline	2,965	0	0	354	867	712	0	14,892	7,068	0	438	343	427	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Unleaded Motor Gasoline	3,064	0	0	875	911	640	0	29,046	7,707	0	411	228	209	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Aviation Gasoline	10	0	0	0	0	27	0	257	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Naphtha-Type Jet Fuel	140	40	0	29	59	0	0	454	26	0	244	63	116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Kerosene-Type Jet Fuel	313	0	0	103	32	541	0	9,419	2,305	0	149	4	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Kerosene	96	0	0	0	0	0	0	375	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Distillate Fuel Oil	2,159	0	0	295	444	208	0	16,692	4,613	0	289	356	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residual Fuel Oil	0	0	0	98	43	0	0	342	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Naphtha and Other Oils for Petro Feedstock	61	100	0	7	0	0	0	101	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Special Naphthas	0	0	0	0	0	0	0	183	142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Lubricants	0	37	0	36	37	0	0	600	202	0	12	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Waxes	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asphalt and Road Oil	0	0	0	118	0	0	0	145	401	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	55	19	0	102	76	0	0	57	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total All Products	8,892	196	0	3,175	8,902	2,199	0	75,043	31,768	0	1,543	1,823	756	976	0	1,876	0	16,921	0	0	0	0	0	0	0	0	0	0	0	0	0	0

See footnotes at end of table.

Table 27. Movements of Petroleum Products by Pipeline between PAD Districts, September 1984  
(Thousand Barrels)

Commodity	From I to			From II to			From III to			From IV to			From V to		
	II	III	I	I	III	IV	I	II	IV	V	II	III	V	III	IV
Pentanes Plus	0	0	0	0	1,077	0	0	1,318	0	0	0	128	114	0	0
Liquefied Petroleum Gases	0	0	0	1,158	5,356	71	1,749	7,444	0	0	0	701	642	0	0
Motor Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	4,381	0	982	1,778	1,352	1,352	34,057	14,162	0	849	0	571	0	636	0
Finished Leaded Motor Gasoline	2,058	0	254	867	712	11,836	6,820	0	438	0	438	343	0	427	0
Finished Unleaded Motor Gasoline	2,323	0	728	911	640	22,221	7,342	0	411	0	411	228	0	209	0
Finished Aviation Gasoline	10	0	0	0	0	27	39	136	0	0	0	0	0	0	0
Naphtha-Type Jet Fuel	0	0	0	0	59	0	419	26	0	244	0	63	0	116	0
Kerosene-Type Jet Fuel	140	0	94	32	541	7,273	2,034	0	149	0	4	0	64	0	0
Kerosene	35	0	0	0	0	0	284	0	0	0	0	0	0	0	0
Distillate Fuel Oil	1,539	0	232	444	208	13,539	4,337	0	289	0	356	0	160	0	0
Residual Fuel Oil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Miscellaneous Products	0	0	94	0	0	0	0	0	0	0	0	0	0	0	0
Total	6,105	0	2,560	8,746	2,199	57,360	29,457	0	1,531	0	1,823	756	976	0	0

Source: See Explanatory Notes on Data Collection and Estimation.

Table 28. Movements of Crude Oil and Petroleum Products by Tanker and Barge between PAD Districts, September 1984  
(Thousand Barrels)

Commodity	From I to			From II to			From III to					From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	V	I	III
Crude Oil .....	19	0	0	0	0	0	0	0	0	0	0	0	1,876	0 16,881
Petroleum Products .....	2,787	196	0	615	156	0	17,683	1,646	2,683	13,354	2,311	12	0	0 40
Liquefied Petroleum Gases .....	0	0	0	0	0	0	116	0	0	116	0	0	0	0 0
Unfinished Oils .....	10	0	0	0	0	0	405	0	275	131	334	0	0	0 0
Motor Gasoline Blending Components .....	0	0	0	0	0	0	174	0	0	174	30	0	0	0 0
Finished Motor Gasoline .....	1,648	0	0	247	0	0	9,881	600	548	8,733	613	0	0	0 0
Finished Leaded Motor Gasoline .....	907	0	0	100	0	0	3,056	76	0	2,980	248	0	0	0 0
Finished Unleaded Motor Gasoline .....	741	0	0	147	0	0	6,825	524	548	5,753	365	0	0	0 0
Finished Aviation Gasoline .....	0	0	0	0	0	0	218	19	61	138	4	0	0	0 0
Naphtha-Type Jet Fuel .....	140	40	0	29	0	0	65	0	0	65	0	0	0	0 0
Kerosene-Type Jet Fuel .....	173	0	0	9	0	0	2,146	80	341	1,725	271	0	0	0 0
Kerosene .....	61	0	0	0	0	0	91	0	72	19	0	0	0	0 0
Distillate Fuel Oil .....	620	0	0	63	0	0	3,153	947	608	1,598	276	0	0	0 0
Residual Fuel Oil .....	0	0	0	98	43	0	342	0	70	272	0	0	0	0 0
Naphtha and Other Oils for Petro Feed Use .....	61	100	0	7	0	0	101	0	101	0	19	0	0	0 0
Special Naphthas .....	0	0	0	0	0	0	183	0	36	147	142	0	0	0 0
Lubricants .....	0	37	0	36	37	0	600	0	459	141	202	12	0	0 40
Waxes .....	0	0	0	0	0	0	5	0	5	0	0	0	0	0 0
Asphalt and Road Oil .....	0	0	0	118	0	0	145	0	50	95	401	0	0	0 0
Miscellaneous Products .....	55	19	0	8	76	0	57	0	57	0	19	0	0	0 0
Total .....	2,787	196	0	615	156	0	17,683	1,646	2,683	13,354	2,311	12	1,876	0 16,921

Source See Explanatory Notes on Data Collection and Estimation.

Table 29. Net Movements of Crude Oil and Petroleum Products by Pipeline, Tanker and Barge between PAD Districts, September 1984  
(Thousand Barrels)

Commodity	PAD District I			PAD District II			PAD District III			PAD District IV			PAD District V		
	Receipts into PADD I	Shipments from PADD I	Net Receipts into PADD I	Receipts into PADD II	Shipments from PADD II	Net Receipts into PADD II	Receipts into PADD III	Shipments from PADD III	Net Receipts into PADD III	Receipts into PADD IV	Shipments from PADD IV	Net Receipts into PADD IV	Receipts into PADD V	Shipments from PADD V	Net Receipts into PADD V
<b>Crude Oil (Tanker and Barge only)</b>	1,876	19	1,857	19	0	19	16,881	0	16,881	0	0	0	0	18,757	-18,757
<b>Petroleum Products</b>	78,218	9,069	69,149	42,464	14,276	28,188	9,894	108,354	-98,460	2,199	3,555	-1,356	2,519	40	2,479
Pentanes Plus	0	0	0	1,446	1,077	369	1,191	1,318	-127	0	242	-242	0	0	0
Liquefied Petroleum Gases	3,023	0	3,023	8,145	6,585	1,560	5,998	9,309	-3,311	71	1,343	-1,272	0	0	0
Unfinished Oils	406	10	396	344	0	344	0	740	-740	0	0	0	0	0	0
Motor Gasoline Blending Components	174	0	174	30	0	30	0	204	-204	0	0	0	0	0	0
Aviation Gasoline Blending Components	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finished Motor Gasoline	45,167	6,029	39,138	21,375	4,359	17,016	1,778	59,562	-57,784	1,352	1,207	145	1,485	0	1,485
Finished Leaded Motor Gasoline	15,246	2,965	12,281	10,376	1,933	8,443	867	22,398	-21,531	712	770	-58	865	0	865
Finished Unleaded Motor Gasoline	29,921	3,064	26,857	10,999	2,426	8,573	911	37,164	-36,253	640	437	203	620	0	620
Finished Aviation Gasoline	257	10	247	150	27	123	0	397	-397	27	0	27	0	0	0
Naphtha-Type Jet Fuel	513	180	333	229	88	141	99	754	-655	0	179	-179	360	0	360
Kerosene-Type Jet Fuel	9,522	313	9,209	2,622	676	1,946	32	11,873	-11,841	541	68	473	213	0	213
Kerosene	375	96	279	96	0	96	0	375	-375	0	0	0	0	0	0
Distillate Fuel Oil	16,987	2,159	14,828	7,128	947	6,181	444	21,594	-21,150	208	516	-308	449	0	449
Residual Fuel Oil	440	0	440	0	141	-141	43	342	-299	0	0	0	0	0	0
Naphtha and Other Oils for Petro Feedstock Use	108	161	-53	80	7	73	100	120	-20	0	0	0	0	0	0
Special Naphthas	183	0	183	142	0	142	0	325	-325	0	0	0	0	0	0
Lubricants	636	37	599	202	73	129	114	814	-700	0	0	0	12	40	-28
Waxes	5	0	5	0	0	0	0	5	-5	0	0	0	0	0	0
Asphalt and Road Oil	263	0	263	401	118	283	0	546	-546	0	0	0	0	0	0
Miscellaneous Products	159	74	85	74	178	-104	95	76	19	0	0	0	0	0	0
<b>Total All Products</b>	80,094	9,088	71,006	42,483	14,276	28,207	26,775	108,354	-81,579	2,199	3,555	-1,356	2,519	18,797	-16,278

Source See Explanatory Notes on Data Collection and Estimation

Table 30. Production of Residual Fuel Oil by Sulfur Content, September 1984  
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV			United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Daks.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La., Gulf Coast	No La., Ark	New Mexico	Total	Rocky Mt	West Coast	
Residual Fuel Oil	3,526	61	3,587	68	1,251	225	201	1,745	706	6,556	2,889	213	5	10,369	307	9,819	25,827
0.00 to 0.30% Sulfur	738	14	752	0	90	0	0	90	33	164	397	88	5	687	71	433	2,033
0.31 to 1.00% Sulfur	2,603	2	2,605	30	298	0	85	413	572	1,048	1,541	95	0	3,256	53	2,432	8,769
Greater Than 1.00% Sulfur	185	45	230	38	863	225	116	1,242	101	5,344	951	30	0	6,426	183	6,954	15,035

Source: See Explanatory Notes on Data Collection and Estimation

Table 31. Stocks of Residual Fuel Oil by Sulfur Content, September 1984  
(Thousand Barrels)

Commodity	PAD District I			PAD District II					PAD District III					PAD District IV			United States
	East Coast	Appalachian #1	Total	Appalachian #2	Ind., Ill., Ky	Minn., Wisc., Daks.	Okl., Kans., Mo.	Total	Texas Inland	Texas Gulf Coast	La., Gulf Coast	No La., Ark	New Mexico	Total	Rocky Mt	West Coast	
Residual Fuel Oil - 0.00 to 0.30% Sulfur	428	12	440	0	78	4	0	82	86	51	210	14	11	372	81	345	1,320
Refinery	---	---	4,809	---	---	---	---	136	---	---	---	---	---	0	0	0	4,945
Bulk Terminal	---	---	5,249	---	---	---	---	218	---	---	---	---	---	372	81	345	6,265
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Residual Fuel Oil - 0.31 to 1.00% Sulfur	1,082	3	1,085	36	441	0	123	600	138	784	980	77	0	1,979	108	1,455	5,227
Refinery	---	---	8,542	---	---	---	---	324	---	---	---	---	---	1,514	0	295	10,675
Bulk Terminal	---	---	9,627	---	---	---	---	924	---	---	---	---	---	3,493	108	1,750	15,902
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Residual Fuel Oil - Greater than 1.00% Sulfur	603	52	655	3	991	315	65	1,374	170	3,232	1,004	56	5	4,467	350	4,467	11,313
Refinery	---	---	9,473	---	---	---	---	981	---	---	---	---	---	1,506	0	1,385	13,345
Bulk Terminal	---	---	10,128	---	---	---	---	2,355	---	---	---	---	---	5,973	350	5,852	24,658
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Source: See Explanatory Notes on Data Collection and Estimation

-- Not Applicable

Table 32. Movements of Residual Fuel Oil by Tanker and Barge between PAD Districts, by Sulfur Content, September 1984  
(Thousand Barrels)

Commodity	From I to			From II to			From III to			From V to		
	II	III	V	I	III	V	I	New Eng	Cent Atl	Low Atl	II	III
Residual Fuel Oil	0	0	0	0	98	43	0	342	0	70	272	0
0.00 to 0.30% Sulfur	0	0	0	0	0	0	0	0	0	0	0	0
0.31 to 1.00% Sulfur	0	0	0	0	0	0	0	0	0	0	0	0
Greater Than 1.00% Sulfur	0	0	0	0	98	43	0	272	0	0	0	0

Source: See Explanatory Notes on Data Collection and Estimation

Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, September 1984  
(Thousand Barrels)

Country	Residual Fuel Oil			Total
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	
Arab OPEC				
Algeria . . . . .	588	352	0	940
Iraq . . . . .	0	0	0	0
Kuwait . . . . .	0	0	334	334
Libya . . . . .	0	0	0	0
Qatar . . . . .	0	0	0	0
Saudi Arabia . . . . .	0	0	0	0
United Arab Emirates . . . . .	0	0	546	546
Subtotal Arab OPEC . . . . .	588	352	880	1,820
Other OPEC				
Ecuador . . . . .	0	0	178	178
Gabon . . . . .	0	0	0	0
Indonesia . . . . .	0	86	46	132
Iran . . . . .	0	0	0	0
Nigeria . . . . .	163	449	0	612
Venezuela . . . . .	1,038	1,069	2,650	4,757
Subtotal Other OPEC . . . . .	1,201	1,604	2,874	5,679
Other				
Angola . . . . .	0	0	0	0
Australia . . . . .	0	0	9	9
Bahamas . . . . .	655	210	423	1,288
Bolivia . . . . .	0	0	0	0
Brazil . . . . .	947	0	0	947
Brunei . . . . .	0	0	0	0
Canada . . . . .	71	50	100	220
Congo . . . . .	0	185	0	185
Egypt . . . . .	0	0	0	0
France . . . . .	0	0	0	0
Ghana . . . . .	0	0	0	0
Liberia . . . . .	0	0	0	0
Malaysia . . . . .	0	0	0	0
Mexico . . . . .	1	0	602	604
Netherlands . . . . .	0	0	0	0
Netherlands Antilles . . . . .	275	0	2,366	2,641
Norway . . . . .	0	0	0	0
Oman . . . . .	0	0	0	0
People's Republic of China . . . . .	0	0	0	0
Peru . . . . .	0	0	272	272
Puerto Rico . . . . .	0	0	0	0
Romania . . . . .	0	0	0	0
Spain . . . . .	0	0	0	0
Syria . . . . .	0	0	0	0
Trinidad . . . . .	0	0	0	0
Tunisia . . . . .	0	0	0	0
United Kingdom . . . . .	0	0	0	0
Virgin Islands . . . . .	1,432	1,659	620	3,711
Yugoslavia . . . . .	0	0	0	0
Zaire . . . . .	0	0	0	0

See footnotes at end of table

Table 33. Imports of Residual Fuel Oil by Sulfur Content by Country of Origin, September 1984  
(Thousand Barrels)  
(continued)

Country	Residual Fuel Oil			
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	Total
Other				
Other Western Hemisphere	0	0	0	0
Other Eastern Hemisphere	(s)	177	313	490
Subtotal Other	3,381	2,280	4,705	10,367
Total Imports	5,170	4,235	8,460	17,866

(s) = Less than 500 barrels.  
Note: Total may not equal sum of components due to independent rounding.  
Source: See Explanatory Notes on Data Collection and Estimation.

Table 34. Imports of Residual Fuel Oil by Sulfur Content by State of Entry, September 1984  
(Thousand Barrels)

State	Residual Fuel Oil			
	0.00 to 0.30%	0.31 to 1.00%	Greater Than 1.00%	Total
PAD District I	4,281	3,523	5,997	14,901
Florida	225	875	361	1,460
Georgia	0	0	15	15
Maine	0	220	533	752
Maryland	0	0	483	483
Massachusetts	0	0	1,210	1,210
New Hampshire	0	0	85	85
New Jersey	616	1,098	1,747	3,462
New York	3,006	1,082	2,011	6,099
North Carolina	0	0	134	134
Pennsylvania	149	349	0	498
South Carolina	0	0	90	90
Vermont	11	0	(s)	11
Virginia	275	0	328	603
PAD District II	49	0	18	67
Michigan	49	0	0	49
Minnesota	0	0	12	12
North Dakota	1	0	6	6
PAD District III	839	347	1,361	2,547
Louisiana	0	0	174	174
Texas	839	347	1,187	2,373
PAD District IV	1	0	6	7
Montana	1	0	6	7
PAD District V	(s)	266	78	344
California	0	0	2	2
Hawaii	(s)	263	76	339
Washington	0	3	0	3
All PAD Districts	5,170	4,236	8,460	17,866

(s) = Less than 500 barrels.  
Note: Total may not equal sum of components due to independent rounding.  
Source: See Explanatory Notes on Data Collection and Estimation.







# Definitions of Petroleum Products and Other Terms

**Alcohol.** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group;  $\text{CH}-(\text{CH})_n-\text{OH}$ . Alcohol includes methanol and ethanol.

**Alkylation.** A refinery process for chemically combining isoparaffin with olefin hydrocarbons. The product, alkylate, has high octane value and is blended with motor and aviation gasoline to improve the antiknock value of the fuel.

**API Gravity.** An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API; it may be calculated in terms of the following formula:

$$\text{Deg API} = \frac{141.5}{\text{sp gr } 60\text{F}/60\text{F}} - 131.5$$

**Aromatics.** Hydrocarbons characterized by unsaturated ring structures of carbon atoms. Commercial petroleum aromatics are benzene, toluene, and xylene.

**Asphalt.** A dark-brown-to-black cement-like material containing bitumens as the predominant constituents, obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts. The conversion factor for asphalt is 5.5 barrels of 42 U.S. gallons per short ton.

**ASTM.** The acronym for the American Society for Testing and Materials.

**Aviation Gasoline Blending Components.** Finished components in the gasoline range which will be used for blending or compounding into finished aviation gasoline.

**Aviation Gasoline (Finished).** All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G5572. Excludes blending components which will be used in blending or compounding into finished aviation gasoline.

**Barrel.** A volumetric unit of measure for crude oil and petroleum products equivalent to 42 U.S. gallons. This measure is used in most statistical reports. Factors for converting petroleum coke, asphalt and wax to barrels are given in the definitions for these products.

**Barrels Per Calendar Day.** See *Operable Capacity*.

**Barrels Per Stream Day.** See *Operable Capacity*.

**Bi-Metallic.** A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of two metals (e.g. platinum, rhenium).

**Butane.** A normally gaseous straight-chain or branch-chain hydrocarbon, ( $\text{C}_4\text{H}_{10}$ ). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is covered by ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

**Isobutane.** A normally gaseous branch-chain hydrocarbon, ( $\text{C}_4\text{H}_{10}$ ). It is a colorless paraffinic gas that boils at a temperature of 10.9 degrees F. It is extracted from natural gas or refinery gas streams.

**Normal Butane.** A normally gaseous straight-chain hydrocarbon, ( $\text{C}_4\text{H}_{10}$ ). It is a colorless paraffinic gas that boils at a temperature of 31.1 degrees F. It is extracted from natural gas or refinery gas streams.

**Butylene.** An olefinic hydrocarbon, ( $\text{C}_4\text{H}_8$ ), recovered from refinery processes.

**Catalytic Cracking.** The refining process of breaking down the larger, heavier, and more complex hydrocarbon molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil.

**Catalytic Hydrocracking.** A refining process for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel and/or high grade fuel oil. Hydrocracking is an efficient, relatively low temperature process using hydrogen and a catalyst.

**Catalytic Hydrotreating.** A process for treating petroleum fractions (e.g. distillate fuel oil and residual oil) and unfinished oils (e.g. naphthas, reformer feeds and heavy gas oils) in the presence of catalysts and substantial quantities of hydrogen to upgrade their quality.

**Catalytic Reforming.** The use of controlled heat and pressure with catalysts to effect the rearrangement of certain hydrocarbon molecules without altering their composition appreciably; the conversion of low-octane gasoline fractions into higher octane stocks suitable for blending into finished gasoline; also the conversion of naphthas to obtain a more volatile product of higher octane number.

**Conventional.** A term used to describe a type of catalyst. A catalytic process utilizing a catalyst comprised of a metal and a non-metal (e.g. platinum, alumina).

**Coal.** A generic term applied to carbonaceous rocks that were formed by the partial or complete decomposition of vegetation. These stratified carbonaceous rocks are either solid or brittle and are highly combustible. In-

cludes lignite, bituminous coal, and anthracite which conform to ASTM Specification D388.

**Crude Distillation.** The refining process of separating crude oil components by heating and subsequent condensing of the fractions by cooling

**Crude Oil** (including Lease Condensate) A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite and oil shale. Drip gases are also included, but topped crude oil (residual) oil and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign according to the following

**Domestic.** Crude oil produced in the United States or from its "outer continental shelf" as defined in 43 U.S.C. 1331.

**Foreign.** Crude oil produced outside the United States. Imported Athabasca hydrocarbons are included.

**Delayed Coking.** A process to produce low Conradson carbon gas oil for catalytic cracking feedstock and for gasoline.

**Distillate Fuel Oil.** A general classification for one of the petroleum fractions produced in conventional distillation operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; No. 1, No. 2, and No. 4 diesel fuels.

**No. 1 Fuel Oil.** A light distillate fuel oil intended for use in vaporizing pot-type burners. ASTM Specification D396 specifies for this grade maximum distillation temperatures of 400 degrees F. at the 10-percent point and 550 degrees F. at the 90-percent point, and kinematic viscosities between 1.4 and 2.2 centistokes at 100 degrees F.

**No. 2 Fuel Oil.** A distillate fuel oil for use in atomizing-type burners for domestic heating or for moderate capacity commercial-industrial burner units. ASTM Specification D396 specifies for this grade distillation temperatures at the 90-percent point between 540 degrees and 640 degrees F., and kinematic viscosities between 2.0 and 3.6 centistokes at 100 degrees F.

**No. 1 and No. 2 Diesel Fuel Oils.** Distillate fuel oils used in compression-ignition engines, as given by ASTM Specification D975:

**No. 1-D.** A volatile distillate fuel oil with a boiling range between 300-575 degrees F. and used in high-speed diesel engines generally operated under variations in speed and load. Includes type C-B diesel fuel used for city buses and similar operations. Properties are defined in ASTM Specification D975.

**No. 2-D.** A gas oil type distillate of lower volatility with distillation temperatures at the 90-percent point between 540-640 degrees F. for use in high-speed diesel engines generally operated under uniform speed and load conditions. Includes Type R-R diesel fuel used for railroad locomotive engines, and Type T-T for diesel-engine trucks. Properties are defined in ASTM Specification D975.

**No. 4 Fuel Oil.** A fuel oil for commercial burner installations not equipped with preheating facilities. It is used extensively in industrial plants. This grade is a blend of distillate fuel oil and residual fuel oil stocks that conforms to ASTM Specification D396 or Federal Specification VV-F-815C; its kinematic viscosity is between 5.8 and 26.4 centistokes at 100 degrees F. Also included is No. 4-D, a fuel oil for low- and medium-speed diesel engines that conforms to ASTM Specification D975.

**Eastern Hemisphere.** That half of the earth east of the Atlantic Ocean which includes Europe, Asia, Africa and Australia. The Hawaiian Foreign Trade Zone is in this hemisphere.

**Electric Energy (Purchased).** Electricity purchased for refinery operations that is not produced within the refinery complex.

**Ethane.** A normally gaseous straight-chain hydrocarbon, (C<sub>2</sub>H<sub>6</sub>). It is a colorless paraffinic gas that boils at a temperature of -127.48 degrees F. It is extracted from natural gas and refinery gas streams.

**Ethylene.** An olefinic hydrocarbon, (C<sub>2</sub>H<sub>4</sub>), recovered from refinery processes or petrochemical processes.

**Field Production.** Represents crude oil production on leases, natural gas liquids production at natural gas processing plants, and new supply of other hydrocarbons and alcohol.

**Fluid Coking.** A thermal process utilizing the fluidized-solids technique for continuous conversion of heavy, low-grade oils into lighter products.

**Gasohol.** See **Motor Gasoline (Finished).**

**Gas Oil.** A liquid petroleum distillate having a viscosity intermediate between that of kerosene and lubricating oil. Derives its name from having originally been used in the manufacture of illuminating gas. Now supplies distillate-type fuel oils and diesel fuel, also cracked to produce gasoline.

**Gasoline Blending Components.** Finished components in the gasoline range which will be used for blending or compounding into finished aviation or motor gasoline.

**Idle Capacity.** The component of operable capacity that is not in operation and not under active repairs, but capable of being placed in operation within 30 days; and capacity not in operation but under active repairs that can be completed within 90 days.

**Imported Crude Oil Burned As Fuel.** The amount of foreign crude oil burned as a fuel oil, usually as residual fuel oil, without being processed as such. Imported

crude oil burned as fuel includes lease condensate and liquid hydrocarbons produced from tar sand oil, gilsonite, and shale oil.

**Isobutane.** See *Butane*.

**Isomerization.** A refining process which alters the fundamental arrangement of atoms in the molecule. Used to convert normal butane into isobutane, an alkylation process feedstock, and normal pentane and hexane into isopentane and isohexane, high-octane gasoline components.

**Kerosene.** A petroleum distillate that boils at a temperature between 300-550 degrees F., that has a flash point higher than 100 degrees F. by ASTM Method D56, that has a gravity range from 40-46 degrees API, and that has a burning point in the range of 150-175 degrees F. Included are the two classifications recognized by ASTM D3699: No. 1-K and No. 2-K, and all grades of kerosene called range or stove oil which have properties similar to No. 1 fuel oil, but with a gravity of about 43 degrees API and a maximum end-point of 625 degrees F. Kerosene is used in space heaters, cook stoves, and water heaters and is suitable for use as an illuminant when burned in wick lamps.

**Kerosene-Type Jet Fuel.** A quality kerosene product with an average gravity of 40.7 degrees API, and a 10 percent distillation temperature of 400 degrees F. It is covered by ASTM Specification D1655 and Military Specification MIL-T-5624L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; it is used primarily for commercial turbojet and turboprop aircraft engines.

**Lease Condensate.** A natural gas liquid recovered from gas well gas (associated and nonassociated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

**Liquefied Petroleum Gases (LPG).** Ethane, Ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate raw natural gas plant liquids.

**Liquefied Refinery Gases (LRG).** Liquefied petroleum gases fractionated from refinery or still gases. Through compression and/or refrigeration they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane. Excludes still gas used for chemical or rubber manufacture which is reported as a petrochemical feedstock and also excludes liquefied petroleum gases intended for blending into gasoline which are reported as gasoline blending components. Liquefied refinery gases are reported for use as petrochemical feedstock or other uses.

**Lubricating Oils.** A substance used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. "Lubricants" includes all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. The three categories include:

**Bright Stock.** A refined, high viscosity lubricating oil base stock that is usually made from a residuum by a treatment such as deasphalting, acid treatment, or solvent extraction.

**Neutral.** A distillate lubricating oil base stock with a viscosity that is usually not above 550 Saybolt Universal Seconds (SUS) at 100 degrees F. It is prepared by a treatment such as hydrofining, acid treatment, or solvent extraction.

**Other.** A lubricating oil base stock used in finished lubricating oils and greases, including black, coastal, and red oils

**Middle Distillates.** A general classification that includes distillate fuel oil and kerosene.

**Miscellaneous Products.** Includes all finished products not classified elsewhere, e.g., petrolatum, absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, speciality oils and medicinal oils.

**Motor Gasoline Blending Components.** Finished components in the gasoline range which will be used for blending or compounding into finished motor gasoline. Pool gasoline is included in this category.

**Motor Gasoline (Finished).** A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in spark-ignition engines. Specifications for motor gasoline, as given in ASTM Specification D439 or Federal Specification VV-G-1690B, include a boiling range of 122-158 degrees F. at the 10-percent point to 365-374 degrees F. at the 90-percent point and a Reid vapor pressure range from 9 to 15 psi. "Motor gasoline" includes finished leaded gasoline, finished unleaded gasoline, and gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

**Finished Leaded Gasoline.** Contains more than 0.05 gram of lead per gallon or more than 0.005 gram of phosphorus per gallon. The actual lead content of any given gallon, however, may vary as a function of the size of the producer and company according to specific Environmental Protection Agency waiver provisions. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

**Finished Unleaded Gasoline.** Contains not more than 0.05 gram of lead per gallon and not more than 0.005 gram of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blend stock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

**Gasohol.** A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

**Naphtha-Type Jet Fuel.** A fuel in the heavy naphtha boiling range with an average gravity of 52.8 degrees API and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees F, meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

**Natural Gas.** A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

**Natural Gas Field Facility.** A field facility designed to process natural gas produced from more than one lease for the purpose of recovering condensate from a stream of natural gas, however, some field facilities are designed to recover propane, normal butane, pentanes plus, etc., and to control the quality of natural gas to be marketed.

**Natural Gas Plant Liquids.** Natural gas liquids recovered from natural gas in gas processing plants, and in some situations, from natural gas field facilities. Natural gas liquids extracted by fractionators are also included. These liquids are defined according to the published specification of the Gas Processors Association and the American Society for Testing and Materials and are classified as follows: Ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e. products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

**Natural Gasoline and Isopentane.** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas, that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane which is a saturated branch-chain hydrocarbon, (C<sub>5</sub>H<sub>12</sub>), obtained by fractionation of natural gasoline or isomerization of normal pentane.

**Normal Butane.** See *Butane*.

**OPEC.** The acronym for the Organization of Petroleum Exporting Countries, oil-producing and exporting countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices and future concession rights. Current members are Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.

**Operable Capacity.** The amount of capacity that, at the beginning of the period, is in operation; not in operation, and not under active repairs but capable of being placed in operation within 30 days; or not in operation but under active repairs that can be completed within 90 days. Operable capacity is the sum of the operating and idle capacity and is measured in barrels per calendar day or barrels per stream day.

**Barrels Per Calendar Day.** The maximum number of barrels of input that can be processed in an atmos-

pheric distillation facility during a twenty-four hour period after making allowances for the following limitations:

The capability of downstream facilities to absorb the output of crude oil processing facilities of a given refinery. No reduction is made when a planned distribution of intermediate streams through other than downstream facilities is part of a refinery's normal operation.

The types and grades of inputs to be processed.

The types and grades of products expected to be manufactured.

The environmental constraints associated with refinery operations.

The reduction of capacity for scheduled downtime such as routine inspection, mechanical problems, maintenance, repairs and turnaround.

The reduction of capacity for unscheduled downtime such as mechanical problems, repairs, and slowdowns.

**Barrels Per Stream Day.** The amount a unit can process running at full capacity under optimal crude and product slate conditions.

**Operating Capacity.** The component of operable capacity that is in operation at the beginning of the period.

**Other Hydrocarbons.** Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal tar derivatives, gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

**Pentanes Plus.** A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline and plant condensate.

**Petrochemical Feedstock Use.** Chemical feedstocks derived from petroleum, principally for the manufacture of chemicals, synthetic rubber and a variety of plastics. The categories reported are "Naphtha-Less than 400 degrees F. end-point" and "Other oils over 400 degrees F. end point."

**Naphtha-Less Than 400 Degrees F. End-Point.** A naphtha with an end point of less than 400 degrees F. that is intended for use as a petrochemical feedstock.

**Other Oils-Over 400 Degrees F. End-Point.** Oils with an end point over 400 degrees F. that is intended for use as a petrochemical feedstock.

**Petroleum Coke.** A residue, the final product of the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion factor is 5 barrels of 42 U.S. gallons per short ton.

**Marketable Coke.** Those grades of coke produced in delayed or fluid cokers which may be recovered as relatively pure carbon. This "green" coke may be sold as is or further purified by calcining.

**Catalyst Coke.** In many catalytic operations (i.e., catalytic cracking) carbon is deposited on the catalyst thus, deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refinery process. This carbon or coke is not recoverable in a concentrated form.

**Petroleum Products.** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, naphtha less than 400 F. end-point, other oils over 400 F. end-point, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

**Petroleum Refinery.** An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

**Plant Condensate.** One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

**Primary Stocks.** Stocks of crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tank farms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in transit from Alaska, or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks excludes stocks of foreign origin that are held in bonded warehouse storage.

**Propane.** A normally gaseous straight-chain hydrocarbon, (C<sub>3</sub>H<sub>8</sub>). It is a colorless paraffinic gas that boils at a temperature of -43.67 degrees F. It is extracted from natural gas or refinery gas streams. It includes all products covered by Gas Processors Association Specifications for commercial propane and HD-5 propane and ASTM Specification D1835.

**Propylene.** An olefinic hydrocarbon, (C<sub>3</sub>H<sub>6</sub>), recovered from refinery processes or petrochemical processes.

**Residual Fuel Oil.** The topped crude of refinery operations which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Imports of residual fuel oil include "Imported Crude Oil Burned as Fuel."

**Road Oil.** Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades from 0, the most liquid, to 5, the most viscous.

**Special Naphthas.** All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees F. "Special naphthas" includes all commercial hexane and cleaning solvents conforming to ASTM Specification D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

**Steam (Purchased).** Steam, purchased for use by a refinery, that was not generated from within the refinery complex.

**Still Gas (Refinery Gas).** Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, propylene, etc. Still gas is reported for petrochemical feedstock use and/or refinery fuel use.

**Petrochemical Feedstock Use.** Includes all refinery streams which are used by chemical or rubber manufacturing operations for further processing, less the amount of such streams returned to the source refinery. Finished petrochemical products are not included. For example, polyethylene, butadiene, etc. are considered petrochemical products; therefore, only their feedstock equivalents are included.

**Fuel Use.** All other still gas.

**Strategic Petroleum Reserve (SPR).** Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

**Thermal Cracking.** A refining process in which heat and pressure are used to break down, rearrange, or combine hydrocarbon molecules. Thermal cracking is used to increase the yield of gasoline obtainable from crude oil.

**Unfinished Oils.** Includes all oils requiring further processing, except those requiring only mechanical blending.

**Unfractionated Streams.** Mixtures of unsegregated natural gas liquid components excluding those in plant condensate. This product is extracted from natural gas.

**Vacuum Distillation.** Distillation under reduced pressure (less the atmospheric) which lowers the boiling temperature of the liquid being distilled. This technique with its relatively low temperatures prevents cracking or decomposition of the charge stock.

**Visbreaking.** A thermal cracking process in which heavy vacuum-still bottoms produced on the primary distillation unit are cracked to increase production of distillate products.

**Wax.** A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series pre-

dominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline-fully refined, and crystalline-other. The conversion factor is 280 pounds per 42-U S. gallon barrel.

**Microcrystalline Wax.** Wax extracted from certain petroleum residues having a finer and less apparent crystalline structure than paraffin wax and having the following physical characteristics:

Penetration at 77 degrees F. (D1321)-60 maximum  
Viscosity at 210 degrees F. in Saybolt Universal Seconds (SUS). (D88)-60 SUS (10.22 centistokes) minimum to 150 SUS (31.8 centistokes) maximum.  
Oil content (D721)-5 percent minimum.

**Crystalline-Fully Refined Wax.** A light-colored paraffin wax having the following characteristics:

Viscosity at 210 degrees F. (D88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D721)-0.5 percent maximum. Other +20 color, Saybolt minimum

**Crystalline-Other Wax.** A paraffin wax having the following characteristics.

Viscosity at 210 degrees F. (D88)-59.9 SUS (10.18 centistokes) maximum. Oil Content (D721)-0.51 percent minimum to 15 percent maximum.

**Western Hemisphere.** That half of the earth that includes North and South America and adjacent islands



# Bureau of Mines Petroleum Refining Districts and PAD Districts

*The following are the Bureau of Mines petroleum refining districts which make up the PAD districts*

## **PAD District I**

**East Coast:** District of Columbia and the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, Florida, and the following counties of the State of New York: Cayuga, Tompkins, Chemung and all counties east and north thereof. Also the following counties in the State of Pennsylvania: Bradford, Sullivan, Columbia, Montour, Northumberland, Dauphin, York, and all counties east thereof.

**Appalachian #1:** The State of West Virginia and those parts of the States of Pennsylvania and New York not included in the East Coast District.

## **PAD District II**

**Appalachian #2:** The following counties of the State of Ohio: Erle, Huron, Crawford, Marion, Delaware, Franklin, Pickaway, Ross, Pike, Scioto, and all counties east thereof.

**Indiana—Illinois—Kentucky:** The States of Indiana, Illinois, Kentucky, Tennessee, Michigan, and that part of the State of Ohio not included in the Appalachian District.

**Minnesota—Wisconsin—North and South Dakota:** The States of Minnesota, Wisconsin, North Dakota, and South Dakota.

**Oklahoma—Kansas—Missouri:** The States of Oklahoma, Kansas, Missouri, Nebraska, and Iowa.

## **PAD District III**

**Texas Inland:** The State of Texas except the Texas Gulf Coast District.

**Texas Gulf Coast:** The following counties of the State of Texas: Newton, Orange, Jefferson, Jasper, Tyler, Hardin, Liberty, Chambers, Polk, San Jacinto, Montgomery, Harris, Galveston, Waller, Fort Bend, Brazoria, Wharton, Matagorda, Jackson, Victoria, Calhoun, Refugio, Aransas, San Patricio, Nueces, Kleberg, Kenedy, Willacy, and Cameron.

**Louisiana Gulf Coast:** The following Parishes of the State of Louisiana: Vernon, Rapides, Avoyelles, Pointe Coupee, West Feliciana, East Feliciana, Saint Helena, Tangipahoa, Washington, and all Parishes south thereof. Also the following counties of the State of Mississippi: Pearl River, Stone, George, Hancock, Harrison, and Jackson. Also the following counties of the State of Alabama: Mobile and Baldwin.

**North Louisiana—Arkansas:** The State of Arkansas and those parts of the States of Louisiana, Mississippi, and Alabama not included in the Louisiana Gulf Coast District.

**New Mexico:** The State of New Mexico.

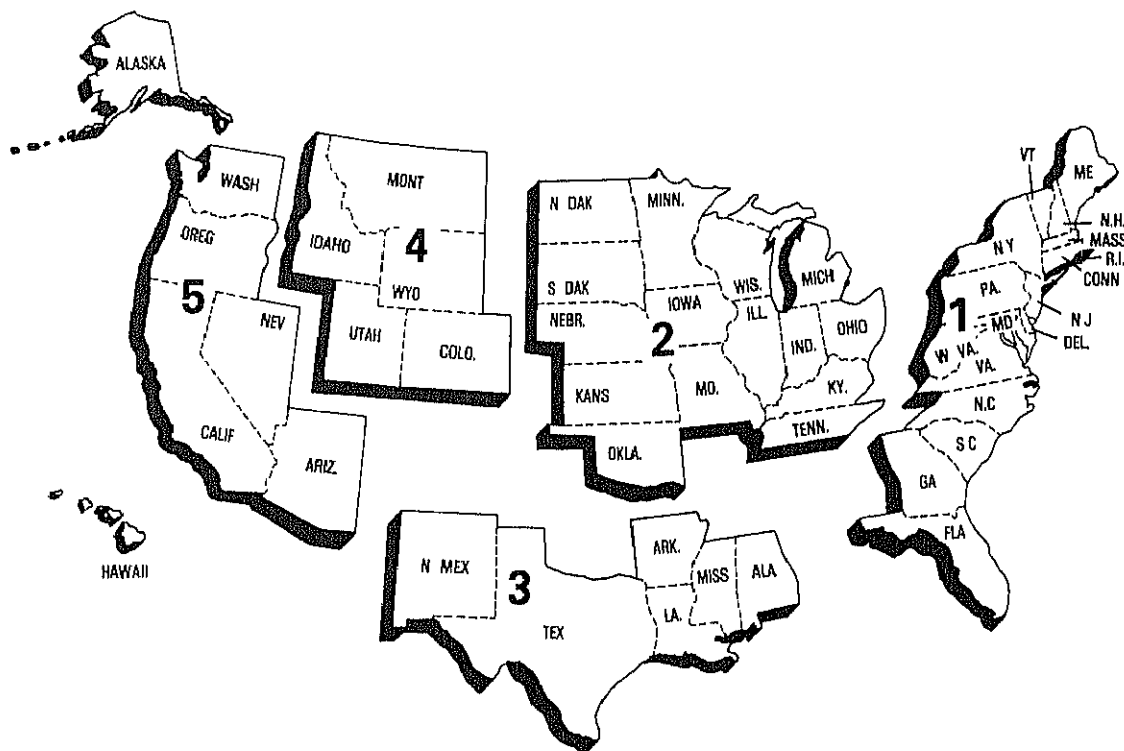
## **PAD District IV**

**Rocky Mountain:** The States of Montana, Idaho, Wyoming, Utah, and Colorado.

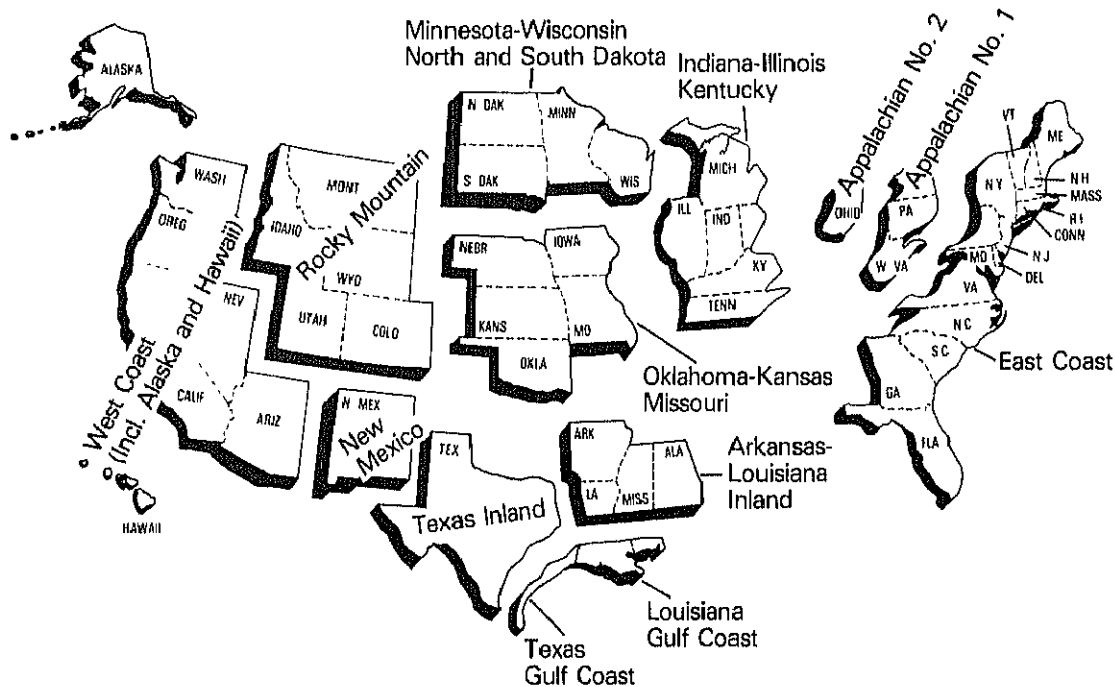
## **PAD District V**

**West Coast:** The States of Washington, Oregon, California, Nevada, Arizona, Alaska, and Hawaii.

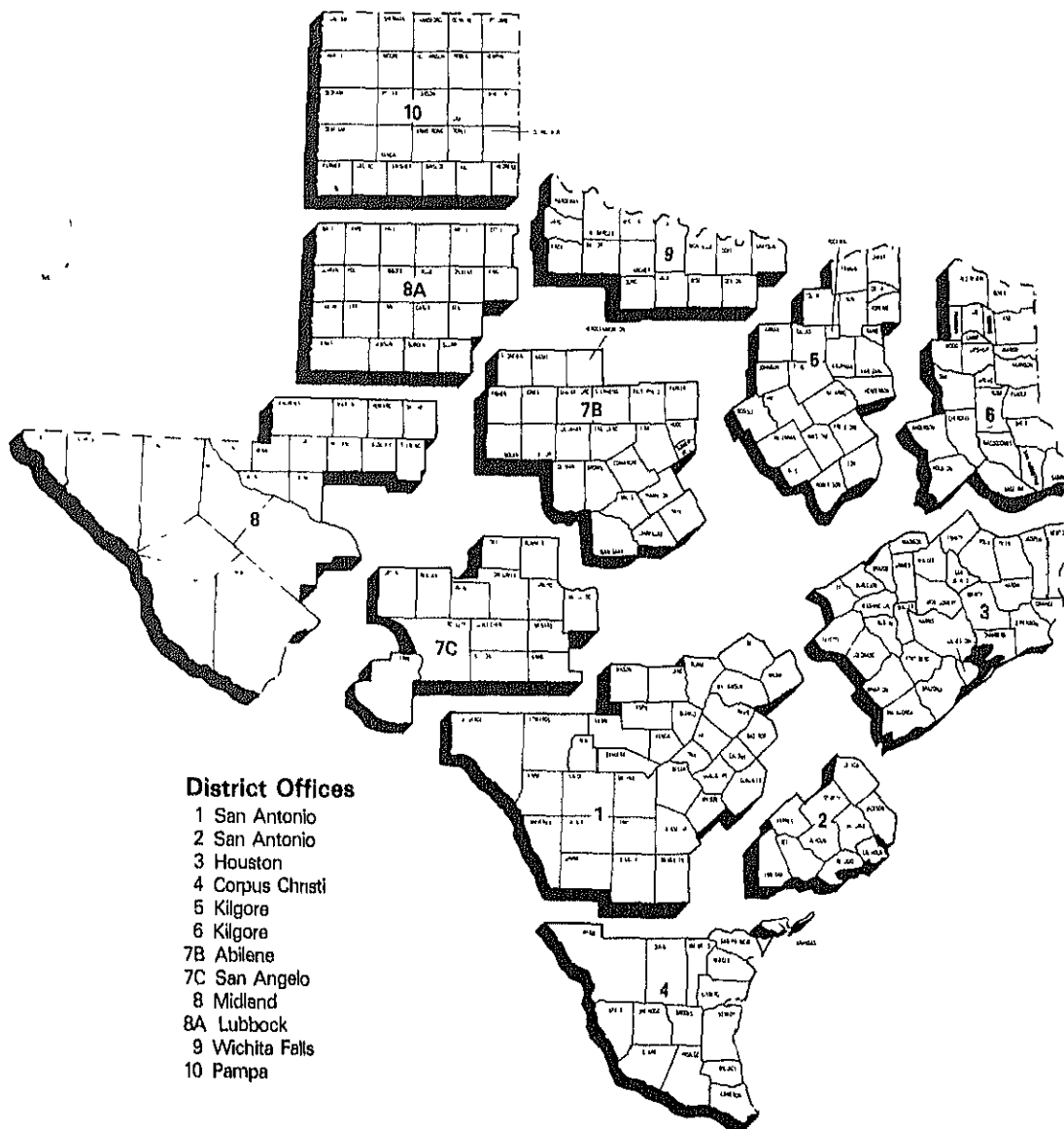
## Petroleum Administration for Defense (PAD) Districts



## Bureau of Mines Refining Districts

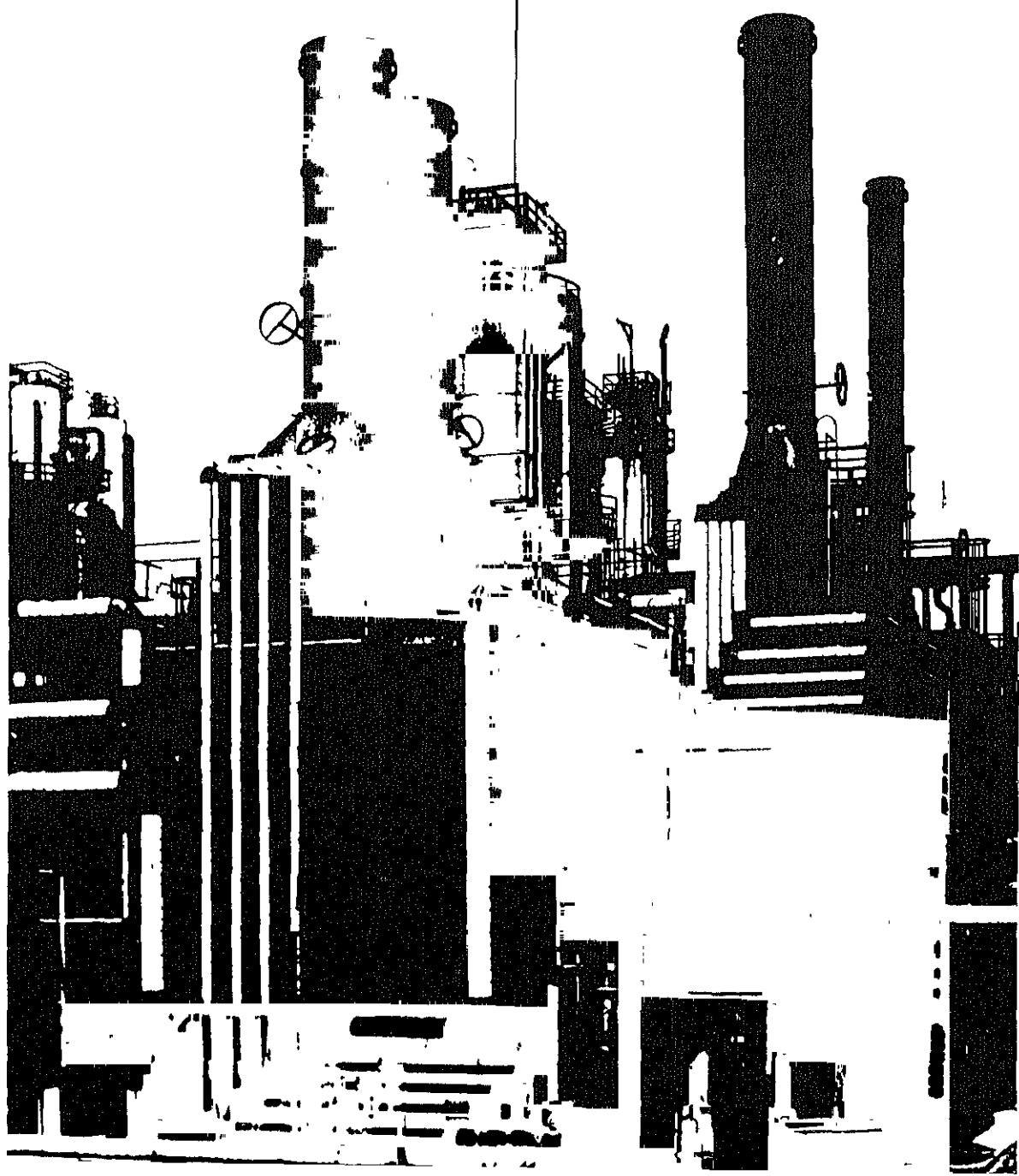


## District Map Oil and Gas Division Railroad Commission of Texas





# Explanatory Notes





# Explanatory Notes

## Note 1: Data Collection Methodology

### Background

Beginning in January 1983, the Energy Information Administration (EIA) unified its petroleum supply data collection activities into the Petroleum Supply Reporting System (PSRS). The PSRS represents a family of data collection survey forms, data processing systems and publication systems that have been consolidated to achieve comparability and consistency throughout. The primary focus of the consolidation has been to revise the weekly and monthly survey reporting forms to assure consistency in form layout, preparation instructions, and definitions. As a result, a new set of survey forms were implemented in January 1983. The following are the new form numbers and their corresponding predecessor forms:

New Form Number	Name	Old Form Number
EIA-800	Weekly Refinery Report	EIA-161
EIA-801	Weekly Bulk Terminal Report	EIA-162
EIA-802	Weekly Product Pipeline Report	EIA-163
EIA-803	Weekly Crude Oil Stocks Report	EIA-164
EIA-804	Weekly Imports Report	EIA-165
EIA-805	Weekly Shipments from Puerto Rico to the United States Report	—
EIA-810	Monthly Refinery Report	EIA-87
EIA-811	Monthly Bulk Terminal Report	EIA-88
EIA-812	Monthly Product Pipeline Report	EIA-89
EIA-813	Monthly Crude Oil Report	EIA-90
ERA-60	Monthly Imports Report	ERA-60
EIA-815	Monthly Shipments from Puerto Rico to the United States Report	FEA-P133-M-0
EIA-816	Monthly Natural Gas Liquids Report	EIA-64
EIA-817	Monthly Tanker and Barge Movement Report	EIA-170

Forms EIA-800 through 805 comprise the Weekly Petroleum Supply Reporting System (WPSRS). This system is designed to collect basic refinery operations and product stock data for major products on a weekly basis. Data from the WPSRS are published in the *Weekly Petroleum Status Report (WPSR)* and are also used to calculate the preliminary statistics in the "Summary Statistics" section of the *Petroleum Supply Monthly*

(PSM). A description of the WPSRS survey forms follows in Note 1.1.

Forms EIA-810-813, 815-817 and ERA-60 comprise the Monthly Petroleum Supply Reporting System (MPSRS). These surveys collect detailed refinery operations data, refinery, bulk terminal and pipeline stocks data, crude oil and petroleum product imports data and movements of petroleum products and crude oil between PAD Districts data. These surveys are the primary source of data for the "Summary Statistics" and "Detailed Statistics" sections of the PSM. A description of MPSRS survey forms follows in Note 1.2.

Data are also obtained in magnetic tape form from the Bureau of the Census on a monthly basis. These tapes contain aggregated import and export statistics that are used in the preparation of the PSM. A description of the Census data follows in Note 1.3.

## Note 1.1: Weekly Petroleum Supply Reporting System (WPSRS)

### Background

The EIA first began publishing weekly petroleum supply statistics in April 1979 in response to the Iranian oil crisis. Initially, the published data were taken from the American Petroleum Institute (API) *Weekly Statistical Bulletin*. However, in January 1980 the EIA began to publish weekly statistics from its own surveys, with the exception of imports statistics which the EIA did not begin collecting until June 1980.

The weekly surveys collect data comparable to those collected on a monthly basis. Selected petroleum companies report weekly data to the EIA on crude oil and petroleum product stocks, refinery inputs and production, and crude oil and petroleum product imports. On Forms EIA-800 through EIA-803, companies report data on a custody basis. On the Form EIA-804, the importer of record reports each shipment entering the United States. On Form EIA-805, a company shipping unfinished oils and finished petroleum products into the United States from Puerto Rico reports each shipment. Current weekly data and the most recent monthly data are used to estimate the totals that are published in the *Weekly Petroleum Status Report*.

### Sample Frame

The sample of companies that report weekly is selected from the universe of companies that report on the comparable monthly surveys. Sampled companies report data only for facilities in the 50 States and District of Columbia.

The sample for each survey is taken from the following universe:

**EIA-800:** Based on the EIA-810 universe, which includes all petroleum refineries in the United States and

its territories, industrial facilities that have crude oil distillation capacity and produce some refined petroleum products, and plants that produce finished motor gasoline through mechanical blending. The selected sample size is 215.

**EIA-801:** Based on the EIA-811 universe, which includes all bulk terminal facilities in the United States and its territories that have either a total bulk storage capacity of 50,000 barrels or more, or that receive petroleum products by tanker, barge, or pipeline. The selected sample size is 93.

**EIA-802:** Based on the EIA-812 universe, which includes all petroleum product pipeline companies in the United States and its territories that transport refined petroleum products, including interstate, intrastate and intracompany pipeline movements. Pipeline companies that transport only natural gas liquids are not included in the EIA-802 frame. Only those pipeline companies that transport products covered in the weekly survey are included. The selected sample size is 65.

**EIA-803:** Based on the EIA-813 universe, which consists of all companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

**EIA-804:** Based on the ERA-60 universe, which includes all importers of record of crude oil and petroleum products into the United States and Puerto Rico. The selected sample size is 65.

**EIA-805:** Based on the EIA-815 universe, which includes all shippers of unfinished oils and petroleum products into the United States from Puerto Rico. Four companies report.

## Sampling Method

The cut-off method is the sampling procedure used for all weekly surveys except the EIA-802, which uses the monthly universe in its entirety. In the cut-off method, companies are ranked from largest to smallest on the basis of the quantities reported during some previous 12-month period. Companies are chosen for the sampling, beginning with the largest and adding companies until the total sample covers 90 percent of the total for the previous time period for each product published in the *Weekly Petroleum Status Report*.

## Collection Methods

Data are collected by mail, mailgram, telephone, Telex, and Telefax on a weekly basis. The report period closes each Friday at 7 a.m. All canvassed firms and terminal operations companies must file by 5 p.m. on the following Monday.

## Estimation and Imputation

After company reports have been checked and entered into the weekly data base, weekly totals for given products are estimated by using the following formula.

The total reported by all companies for the most recent month ( $M_t$ ) is divided by the amount reported by the sample of companies for the most recent month ( $M_s$ ). The result is multiplied by the amount reported by the sample of companies for the current week ( $W_s$ ). The answer,  $W_t$ , is an estimate of the amount that would have been reported by all companies for the current week if all companies reported each week.

$$W_t = \frac{M_t}{M_s} (W_s)$$

This procedure is used to estimate total weekly inputs to refineries and production.

To estimate stocks of finished products, the preceding procedure is followed separately for refineries, bulk terminals, and pipelines. Total estimates are formed by summing over establishment types.

Weekly imports data are highly variable on a company-by-company basis or a week-by-week basis. Therefore, an exponentially smoothed ratio has been developed. The estimate of weekly imports is the sum of the smoothed ratio multiplied by the weekly values and estimates for shipments from Puerto Rico. Imports of other oils includes an adjustment from Census data for unlicensed products because of coverage differences between the monthly imports data and Census data.

Explicit imputation is done for companies which do not respond in a given week. The imputed values are exponentially smoothed means of recent reports from the specific company.

## Response Rates

The response rate for the published estimates is usually between 95 and 98 percent.

## Note 1.2: Monthly Petroleum Supply Reporting System (MPSRS)

### Background

The MPSRS was implemented in January 1983 as the result of an extensive effort to integrate the collection and processing of petroleum supply data that have been collected on other survey forms for many years. The collection of monthly petroleum supply statistics began as early as 1918 when the Bureau of Mines (BOM) began collecting data on refinery operations and crude oil stocks and movements. The collection systems



were further expanded to include natural gas plant liquids production and storage in 1925, imports of crude oil and petroleum products and storage and movements of petroleum products in 1959, and tanker and barge movements of crude oil and petroleum products in 1964. Since their inception, each survey has undergone numerous changes, but the MPSRS is the first effort to make them all consistent and comparable.

## Respondent Frame

**EIA-810:** All petroleum refineries and plants that produce finished motor gasoline through the mechanical blending of liquids which are operated or controlled in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, the Hawaiian Foreign Trade Zone, and Guam. Approximately 313 respondents report on the EIA-810.

**EIA-811:** All bulk terminal facilities in the 50 States and the District of Columbia, Puerto Rico, and the Virgin Islands that (a) have a total bulk storage capacity of 50,000 barrels or more and/or (b) receive petroleum products by tanker, barge, or pipeline, regardless of ownership of the material. Approximately 328 respondents report on the EIA-811.

**EIA-812:** All products pipeline companies that carry petroleum products (including interstate, intrastate and intracompany pipelines) in the 50 States and the District of Columbia. Approximately 94 respondents report on the EIA-812.

**EIA-813:** All companies which carry or store crude oil of 1,000 barrels or more in the 50 States, and the District of Columbia. Included are gathering and trunk pipeline companies (including interstate, intrastate, and intracompany pipelines), crude oil producers, terminal operators, storers of crude oil, and companies transporting Alaskan crude oil by water.

**EIA-815:** All licensed Importers and Importers of record shipping petroleum products from Puerto Rico into the 50 States and the District of Columbia.

Import data from the ERA-60 and EIA-815 are integrated into the import statistics reported in the PSM.

**EIA-816:** All operators of facilities designed to extract liquid hydrocarbons from natural gas stream (natural gas processing plants) or to separate a hydrocarbon stream into its component products, i.e., propane, butane, natural gasoline, etc. (fractionators). Approximately 990 respondents report on the EIA-816.

**EIA-817:** All known companies and plants that have custody of crude oil and petroleum products transported by tanker and barge between PAD Districts or between PAD Districts and the Panama Canal. There are about 50 respondents.

**ERA-60:** All licensed Importers and Importers of record importing crude oil and petroleum products into the

United States and Puerto Rico. The respondent universe consisted of approximately 1,100 firms as of July 31, 1982. However, only a selected 250 importers must report each month regardless of import activity. All others must report only for a month in which they actually had imports. The respondent universe for this survey is updated whenever an import license is granted by the Office of Oil Imports of the ERA.

EIA utilizes a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review industry publications such as the *Oil and Gas Journal* and *LP Gas Almanac* for information on facilities or companies going into operation or closing down. These are augmented by articles in newspapers, letters from respondents indicating changes in status and information received from survey systems operated by other offices.

Periodically an extensive survey study is conducted to completely refresh the frames. This involves consolidating information from every known source including State agencies, federal agencies (e.g., EPA, Corps of Engineers, Census Bureau, etc.), and private industry directories. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data published from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

## Collection Methods

The data for all of the MPSRS surveys are collected monthly. Completed forms are required to be postmarked by the 20th day following the end of the report month, with the exception of the EIA-815 and ERA-60 which are due 15 work days following the end of the report month. Telephone follow-up calls are made to nonrespondents prior to the publication deadline, for their data. An automated mailing list is maintained and is used to monitor receipt of the forms.

## Imputing Missing Data

Imputation is performed only for nonresponding companies that submitted reports the previous month. For such companies, previous monthly values are used for current values. The previous month's ending stocks value is used for both the current month's beginning stocks and the current month's ending stocks. In the event that the previous month's data were estimated, the respondent is contacted and requested to submit estimates. If necessary, to be followed by submission of actual data. Data for nonrespondents on the EIA-815 and 817, and ERA-60 are not imputed.

## Response Rates

As of the filing deadline, the response rates of the EIA-810 through EIA-813 respondents is over 90 per-

cent. The response rate for the EIA-816 is over 85 percent and for the EIA-817 it is 98 percent. All companies that have not responded are contacted by telephone. Although data are taken by telephone to expedite processing, a certified submission is still required. Names of companies that fail to file for 2 consecutive months are forwarded for further noncompliance action.

In July 1983, the ERA-60 survey had a response rate of 99.9 percent by the filing deadline. The universe was 1,100 firms at that time. (Because this is a dynamic survey, the universe is constantly changing.) Standard follow-up of nonrespondents is made to insure that all reports are received, since data are not imputed for nonrespondents. In addition, response is cross-checked with response on the Petroleum Licensing Decrementation System (PLDS), a listing of each month's importers. The response rate is generally 98 to 99 percent by the time the data are first published.

### **Note 1.3: Census Import (IM-145) and Export (EM-522 and EM-594) Data**

#### **Background**

Each month the EIA purchases magnetic tapes of aggregated import and export statistics from the Bureau of the Census. These data provide the only source of export statistics and are used to augment the import data collected by the EIA. Export statistics and import data from the Census tapes on liquefied petroleum gases and bonded ship bunkers are published in the PSM.

#### **Import Statistics (IM-145)**

##### **Coverage**

The Import statistics reflect both government and non-government imports of merchandise from foreign countries into the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico), without regard to whether or not a commercial transaction is involved. In general, the statistics record the physical movement of merchandise into the United States from foreign countries, with the exception of the following types of transactions that are excluded from the statistics:

1. Merchandise in-transit through the United States, when documented with Customs as an in-transit movement.

2. Shipments from anywhere to U.S. possessions, the United States, or the Virgin Islands.

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#### **Source of Import Information**

The official U.S. import statistics are compiled by the Bureau of the Census from copies of the import entry and warehouse withdrawal forms that importers are required by law to file with Customs officials (Customs Forms 7501, 7505, and 7506).

Imported petroleum is reported as *Imports for Consumption*. Imports for consumption are a combination of entries for immediate consumption and withdrawals from warehouses for consumption. With certain exceptions as indicated above, these data generally reflect the total of commodities entered into U.S. consumption channels.

#### **Country and Area of Origin**

The country reported in the statistics as the country of origin is defined as the country where the merchandise was grown, mined, or manufactured. In instances where the country of origin cannot be determined, the transactions are credited to the country of shipment.

#### **Export Statistics (EM-522 and EM-594)**

##### **Coverage**

The export statistics reflect both government and non-government exports of domestic and foreign merchandise from the U.S. Customs territory (the 50 States, the District of Columbia, and Puerto Rico) to foreign countries, without regard to whether or not the exportation involves a commercial transaction. In general, the statistics record the physical movement of merchandise out of the United States to foreign countries, with the exception of the following types of transactions:

1. All shipments from U.S. possessions, regardless of whether the shipments are sent to the United States, to other U.S. possessions, or to foreign countries.

2. Merchandise shipped in transit through the United States from one foreign country to another, when documented as such with U.S. Customs.

3. Bunker fuels and other supplies and equipment for use on departing vessels, planes, or other carriers engaged in foreign trade.

#### **Source of Export Information**

The official U.S. export statistics are compiled by the Bureau of the Census primarily from copies of Shipper's Export Declarations. Exporters are required to file Shipper's Export Declarations with Customs officials. The only exceptions are those exporters who have been authorized to submit data directly to the Bureau of Census on magnetic tape, punched cards, or monthly Shipper's Summary Export Declarations.

## Country and Area of Destination

The country of destination is defined as the country of ultimate destination or the country where the goods are to be consumed, further processed, or manufactured, as known to the shipper at the time of exportation. If the shipper does not know the country of ultimate destination, the shipment is credited to the last country to which the shipper knows that the merchandise will be shipped in the same form as it was when exported.

## Note 2: Supply

The components of petroleum supply are field production, refinery production, imports, and stock withdrawal or addition:

**Field Production** is the sum of crude oil production (including lease condensate), natural gas processing plant production, and new supply (field production) of other liquids used by refineries.

Crude oil production is estimated based on data received from State conservation and revenue agencies. For further explanation, see Explanatory Note 3.

Field production of natural gas plant liquids (NGPL), including finished petroleum products, is reported monthly on survey Form EIA-816, *Monthly Natural Gas Liquids Report*. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month. For survey description and other detail, see Explanatory Note 1.2.

**Refinery Production** of petroleum products is reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published production of these products equals refinery production minus refinery input. Refinery production of unfinished oils and of motor and aviation gasoline blending components appears on a net basis under refinery input. Negative production will occur when the amount of a product produced during the month is less than the amount of that same product that is reprocessed (input) or reclassified to become another product during the same month.

**Imports** of crude oil and petroleum products are reported monthly on Form ERA-60, *Report of Oil Imports into the United States and Puerto Rico*, and Form EIA-815, *Shipments of Refined Products (Including Unfinished Oils) from Puerto Rico to the United States*. In addition, the Census Bureau Tabulation IM-145 summarizes import data from Customs import declarations reported on Customs Forms 7501, 7505, and 7506. The most prominent difference between the EIA and Census systems appears in imports of liquefied petroleum

gases (LPG), where the Census data show a much higher level of imports than EIA data. This occurs because the ERA-60 respondent frame was built by monitoring importers of licensed products and LPGs are not licensed products. Therefore, respondents that import only LPGs have not been identified, and do not report these imports to the Department of Energy. Since these importers are required to file form 7501 with the U.S. Customs Service, EIA obtains data on imports of LPGs from Census Tabulation IM-145. Additional data taken from the IM-145 are relatively small quantities of naphtha- and kerosene-type jet fuels, distillate fuel oils, and residual fuel oils withdrawn from bonded storage for use in international trade. Even though these duty-free fuels are stored on United States shores, they did not enter the United States for domestic consumption and therefore are not included in the ERA-60 reporting system.

**Stock Withdrawal (+) or Addition (-)** is calculated by subtracting stocks at the end of the month from stocks at the beginning of the same month. (Note: The beginning stocks of one month are equal to the ending stocks of the previous month.) A positive result (+) would represent a withdrawal from stocks and an increase in petroleum supplies distributed for domestic consumption. A negative result (-) would represent a buildup of stocks and a reduction in the amount of petroleum supplies distributed for domestic consumption. For a description of survey forms used to make stock withdrawal or addition calculations see Explanatory Note 5.

**Unaccounted-for Crude Oil** is a balancing item that represents the difference between crude oil supply and disposition.

Crude oil supply is the sum of field production, imports and stock withdrawals or additions. Crude oil disposition is the sum of exports, refinery input, losses and product supplied. Unaccounted-for crude oil is calculated by subtracting crude oil supplies from crude oil disposition. A positive result indicates that refiners and exporters reported use of more crude oil than was reported to have been available to them. (This occurs, for example, when imports are undercounted due to late reporting or other problems.) A negative result would indicate that more crude oil was reported to have been supplied to refiners and exporters than they reported used.

## Note 3: Domestic Crude Oil Production

Data for the Crude Oil Production System (COPS) are reported to the Department of Energy by each of the State conservation agencies, which collect crude oil production values for tax purposes. The U.S. Geological Survey reports the volume of crude oil that is produced offshore in Federally-owned waters. With the exception of ten State conservation agencies, all of these reports are received monthly. After each calendar year, these monthly numbers are updated using the annual reports

from the State conservation agencies and the U.S. Geological Survey. The ten States that do not report monthly values are Indiana, Kentucky, Missouri, Arkansas, Utah, New York, Ohio, Pennsylvania, West Virginia, and Wyoming. Monthly values are estimated for these States using the individual linear trends of their historical annual crude oil production values.

There is a time lag of approximately 4 months between the end of the reporting month and the time when the monthly COPS information becomes available. Table 11 of this publication provides information on crude oil production for the most recent month for which COPS values are available. In order to present more timely crude oil production values, the EIA's Dallas Field Office prepares a series of State level estimates which are based on historical production patterns and are summed to obtain the monthly crude oil production values shown in the summary statistics of this publication.

The individual State level estimates are either exponential curve fitted projections based on recent data or are constant level projections based on the average production rate during a recent time period. In some cases, adjustments are made to these estimates based on additional information on expected changes in production rates supplied by a State agency, a trade association, or an individual field operator.

#### Note 4: Disposition

The components of petroleum disposition are crude oil losses, refinery inputs, exports, and products supplied for domestic consumption.

**Crude Oil Losses** is the sum of crude oil losses at refineries. Crude oil losses at refineries are reported on Form EIA-810, *Refinery Report*.

**Refinery Inputs** of crude oil, natural gas plant liquids, and other liquids are reported monthly on survey Form EIA-810, *Monthly Refinery Report*. Published inputs of unfinished oils and of motor and aviation gasoline blending components equal refinery input minus refinery output. Refinery inputs of finished petroleum products are reported on a net basis under refinery production.

**Exports** of crude oil and petroleum products are compiled from Census Bureau tabulations EM-522 and EM-594. Exports include crude oil shipments to Puerto Rico, the Virgin Islands, and the Hawaiian Foreign Trade Zone, which are obtained from refinery receipts reported on Form EIA-810, by refineries located in these places.

**Product Supplied** for each product is calculated by summing field production plus refinery production, plus imports, plus stock withdrawal or minus stock addition, minus crude oil losses (plus net receipts when calculated on a PAD District basis), minus re-

finery input, minus exports. This formula ensures that total disposition equals total supply.

**Products supplied** indicates those quantities of petroleum products supplied for domestic consumption. Occasionally, the result for a product is negative because total disposition of that product exceeds total supply. Negative product supplied may occur for a number of reasons: (1) product reclassification has not been reported, (2) data were misreported or reported late, (3) in the case of calculations on a PAD District basis, the figure for net receipts was inaccurate because the coverage of interdistrict movements was incomplete.

**Product supplied for crude oil** is the sum of crude oil burned on leases and by pipelines as fuel oil. These data are reported on Form EIA-813, *Monthly Crude Oil Report*. Prior to January 1983, crude oil burned on leases and by pipelines as fuel oil were reported as either distillate or residual fuel oil and included in product supplied for these products.

#### Note 5: Stocks

Primary stocks of crude oil are the sum of ending stocks reported monthly on Form EIA-810, *Monthly Refinery Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Crude oil held in the Strategic Petroleum Reserve is included unless otherwise noted. Alaskan crude oil in transit is also included. Stocks of crude oil are also reported weekly on Form EIA-800, *Weekly Refinery Report*, and on Form EIA-803, *Weekly Crude Oil Stocks Report*. Primary stocks of petroleum products are summed from data reported on Form EIA-816, *Monthly Natural Gas Liquids Report*, Form EIA-810, *Monthly Refinery Report*, Form EIA-811, *Monthly Bulk Terminal Report*, and on Form EIA-812, *Monthly Product Pipeline Report*. Primary stocks of petroleum products do not include either secondary stocks held by dealers and jobbers or stocks held by consumers. Petroleum product stocks are also reported weekly on Form EIA-800, *Weekly Refinery Report*, Form EIA-801, *Weekly Bulk Terminal Report*, and Form EIA-802, *Weekly Crude Oil Stocks Report*. For survey descriptions and other details, see Explanatory Notes 1.1 - 1.3.

#### Note 6: Average Stock Levels

The graphs displaying monthly stock levels of crude oil, motor gasoline, distillate fuel oil, residual fuel oil, and liquefied petroleum gases provide the user with recent data as well as a summary of data from January through December or from July through June for the most recent 3-year period. This summary takes the form of an *average range* that includes seasonal variation determined from a longer time period. The average range represents the historical pattern; it is not a forecast.

These curves are updated semiannually (in April and October), by basing the *average ranges* on a more recent time period. Each 3-year data series is adjusted by dropping the first 6 months and including the most recent 6 months.

For each data series, the monthly seasonal factors are estimated by means of a seasonal adjustment technique developed at the Bureau of the Census (Census X-11). The seasonal factors are assumed to be stable (i.e., unchanging from year to year) and additive. The series is deseasonalized by subtracting the seasonal factor for the appropriate month from the reported stock levels. The intent of deseasonalization is to remove only seasonal variation from the data. Thus, a deseasonalized series would contain the same trends and irregularities as the original data. The seasonal factors for distillate fuel oil, residual fuel oil, and liquefied petroleum gases were derived using monthly data for 1977-1983. For motor gasoline, the seasonal factors are based on monthly data for 1978-1983. In 1977, there was virtually no seasonal behavior in motor gasoline stocks. Monthly stock levels stayed at the same high level for the entire year.

After seasonal factors are derived, the most recent 3-year period (from January through December or from July through June) is deseasonalized. The average of the deseasonalized 36-month series determines the midpoint of the deseasonalized average band. The standard error of the deseasonalized 36 months is calculated adjusting for extreme data points. The width of the *average range* is twice this standard error.

The upper curve of the *average range* is defined as the average plus the seasonal factors plus the standard error. The lower curve is defined as the average plus the seasonal factors minus the standard error.

## Note 7: Movements

Movements of crude oil between PAD Districts are reported on Form EIA-817, *Monthly Tanker and Barge Movement Report*, and on Form EIA-813, *Monthly Crude Oil Report*. Petroleum product movements are reported on Forms EIA-817, *Monthly Tanker and Barge Movement Report*, and EIA-812, *Monthly Product Pipeline Report*. Net receipts is the difference between total movements into and total movements out of each PAD District by pipeline, tanker, and barge. For survey descriptions and other detail, see Explanatory Note 1.2.

## Note 8: Preliminary Monthly Statistics

Weekly data (Forms EIA-800, 801, 802, 803, and 804) are used to estimate the most recent monthly values for the *Summary Statistics* section. Since some of the weekly reporting periods overlap two adjacent months,

it is necessary to use weighting factors in the calculation of the monthly values.

To estimate crude oil and petroleum product imports, crude oil input to refineries and production of petroleum products for a specific month, the weekly estimates are weighted by the number of days of that month included in each week, then summed.

End-of-month stock levels of crude oil and the major products (motor gasoline, distillate fuel oil, and residual fuel oil) are calculated in a similar manner, but use only the two weekly reporting periods that cover the end-of-week stocks before and after the end of the month. The end-of-month stock level is calculated by first calculating the stock change between the two weeks. The daily stock change between the two end-of-week stock levels is then calculated. This number is multiplied by the weighting factor of the earlier of the two weeks (the week that covers the last day of the month of interest). This change is added to the earlier of the two end-of-week stock levels to estimate the end-of-month stock level.

Preliminary monthly estimates of domestic crude oil production are calculated as described in Explanatory Note 3.

## Note 9: Notes on Tables

**Note 9.1 Crude Oil and Petroleum Products Overview** statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Crude Oil and Petroleum Products Stock Withdrawal (+) or Addition (-), Petroleum Products Supplied, Total Imports, Crude Oil Imports, Total Exports, and Crude Oil Exports appear as labeled in Table 4. Total Production and Crude Oil Production appear under Field Production in Table 4.

- Natural Gas Plant Production is the sum of Natural Gas Liquids and Finished Petroleum Products Field Production in Table 4.

- Petroleum Products Imports is the sum of Natural Gas Liquids and LRGs, Other Liquids, and Finished Petroleum Products Imports in Table 4.

- Total Crude Oil and Petroleum Products Ending Stocks appear in thousand barrels in Table 2.

**Note 9.2 Crude Oil Supply and Disposition** statistics on the referenced line appear in Table 1 of the Detailed Statistics, except where noted.

- Total Domestic Field Production, Alaskan Field Production, SPR Imports, Other Imports (synonymous with Imports Gross Excl. SPR), SPR and Other Primary Stocks Withdrawal (+) or Addition (-), Unac-

counted For Crude Oil, Refinery Inputs, and Exports appear as labeled in Table 1.

- Crude Losses and Product Supplied appear as labeled in Table 4.
- SPR Ending Stocks and Other Primary Ending Stocks (synonymous with stocks excluding SPR) appear in thousand barrels in Table 1.
- Total Crude Oil Ending Stocks appear in thousand barrels in Table 2.
- Total Imports appear in Table 4.

**Note 9.3 Finished Motor Gasoline Supply and Disposition** statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (–), Exports, and Product Supplied appear as labeled in Table 4.
- Unleaded Percent of Total Product Supplied represents the ratio of finished unleaded motor gasoline product supplied to total finished motor gasoline product supplied, multiplied by 100 and rounded to the nearest tenth.
- Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

**Note 9.4 Distillate and Residual Fuel Oil Supply and Disposition** statistics on the referenced lines appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (–), Exports, and Product Supplied appear as labeled in Table 4.
- Ending Stocks appear in thousand barrels in Table 2.

**Note 9.5 Liquefied Petroleum Gases Supply and Disposition** statistics represent the aggregation of statistics on ethane, propane, butane, butane-propane mixtures, ethane-propane mixtures, and isobutane. The statistics on the referenced line appear in Table 4 of the Detailed Statistics, except where noted.

- Total Production is the sum of Field Production and Refinery Production in Table 4.
- Imports, Stocks Withdrawal (+) or Addition (–), Refinery Inputs, Exports, and Product Supplied appear as labeled in Table 4.

- Ending stocks appear in thousand barrels in Table 2.

**Note 9.6 Other Petroleum Products Supply and Disposition** statistics represent the aggregation of statistics on natural gasoline, isopentane, unfractionated stream, plant condensate, other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, and residual fuel oil. The statistics on the referenced line are aggregated from Table 4 of the Detailed Statistics, except where noted.

- Total Production is the aggregated sum of Field Production and Refinery Production in Table 4.
- Imports, Stock Withdrawal (+) or Addition (–), Refinery Inputs, Exports, and Product Supplied are aggregated from Table 4.
- Ending stocks are aggregated from ending stocks in thousand barrels in Table 2.

#### **Note 9.7 Table 1. U.S. Petroleum Balance**

- Lines (1) through (3): Crude oil (including lease condensate) production for *Alaska, Lower 48 States*, and *Total U.S.* are calculated by calling the conservation agency in Alaska for Alaskan crude oil production during the month, estimating crude oil production in the United States (see Explanatory Note 3), and taking the difference to equal production in the Lower 48 States.
- Line (5): *SPR Imports* are reported on Survey Form ERA-60
- Line (12): *Total Other Sources* equals crude oil stock withdrawal (+) or addition (–) plus unaccounted for crude oil minus crude losses in Table 2
- Line (14): Natural gas plant liquids (NGPL) *Production* equals field production of natural gas liquids (NGL) plus field production of finished petroleum products in Table 2.
- Line (15): NGPL *Imports* equals the sum of the imports of natural gasoline and isopentane, unfractionated stream, and plant condensate imports in Table 2.
- Line (16): NGPL *Stock Withdrawal (+) or Addition (–)* is equal to the sum of stock withdrawal (+) or addition (–) of natural gasoline and isopentane, unfractionated stream, and plant condensate in Table 2.
- Line (17) equals the sum of lines (14), (15), and (16).
- Line (18): Unfinished oils and gasoline blending components *Stock Withdrawal (+) or Addition (–)* equals stock withdrawal (+) or addition (–) for other hydrocarbons and alcohol, for unfinished oils, motor gasoline blending components, and aviation gasoline blending components.

• Line (20): *Other Hydrocarbons and Alcohol New Supply* equals the field production of same in Table 2

• Line (21) *Refinery Processing Gain* is a balancing item equal to total refinery production minus total refinery input in Table 2.

• Line (23). *Total Other Liquids* equals the sum of lines (18) through (22).

• Line (24). *Total Production of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products, plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (–) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (–) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; plus crude oil product supplied in Table 2.

• Line (25): *Gross Imports of Refined Products* equals imports of LPG plus imports of finished petroleum products in Table 2.

• Line (26): *Exports of Refined Products* equals exports of LPG plus exports of finished petroleum products in Table 2.

• Line (27): *Net Imports of Refined Products* equals the difference between lines (25) and (26).

• Line (28): *Total New Supply of Products* equals crude oil input to refineries plus field production of NGPL and finished petroleum products; plus imports of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (–) of natural gasoline and isopentane, unfractionated stream, and plant condensate; plus stock withdrawal (+) or addition (–) of other hydrocarbons and alcohol, unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus imports of unfinished oils, aviation gasoline blending components, and motor gasoline blending components; plus field production of other hydrocarbons and alcohol; plus total refinery production; minus total refinery input; minus crude oil product supplied plus imports of LPG and finished petroleum products; minus exports of LPG and finished petroleum products in Table 2.

• Line (29): *Refined Products Stocks Withdrawal (+) or Addition (–)* equals the sum of stock withdrawal (+) or addition (–) for LPG and finished petroleum products in Table 2.

• Line (30): *Total Petroleum Products Supplied for Domestic Use* equals total products supplied in Table 2.

• Lines (31) through (35) equal the respective products supplied in Table 2.

• Line (36): *Other Products Supplied* equals the sum of natural gasoline and isopentane, unfractionated stream, plant condensate, aviation gasoline, naphtha < 400 Deg. F for petrochemical feedstock use, other oils > 400 Deg. F. for petrochemical feedstock use, special naphthas, lubricants, waxes, coke, asphalt, road oil, still gas, unfinished oils, motor gasoline blending components, aviation gasoline blending components and miscellaneous products supplied in Table 2.

• Line (37): *Total Product Supplied* is equal to total products supplied in Table 2.

• The sum of lines (38) and (39), stocks of *Crude Oil and Lease Condensate (Excluding SPR)* and stocks held by the *Strategic Petroleum Reserve*, equals ending stocks of crude oil in Table 2. SPR stocks are reported on Form EIA-813.

• Line (43): stocks of *Refined Products*, equals the sum of LPG and finished petroleum product stocks in Table 2.

## Note 10: New Stock Basis

In January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported and stock withdrawal calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been:

• Crude Oil: 1982 - 645 (Total) and 351 (Other Primary).

• Crude Oil and Petroleum Products: 1974 - 1,121; 1980 - 1,420; and 1982 - 1,462.

• Motor Gasoline: 1974 - 225; 1980 - 263; 1982 - 244 (Total) and 203 (Finished).

• Distillate Fuel Oil: 1974 - 224; 1980 - 205; and 1982 - 186.

• Residual Fuel Oil: 1974 - 75; 1980 - 91; and 1982 - 68.

• Liquefied Petroleum Gases: 1974 - 113; 1980 - 128; and 1982 - 103.

• Other Petroleum Products: 1974 - 220; 1980 - 249; and 1982 - 259.

• Stock withdrawal calculations beginning in 1975, 1981, 1983 were made using new basis stock levels.

In January 1984, changes were made in the reporting of natural gas liquids. As a result, unfractionated stream, which was formerly included in "Other Petroleum Prod-

ucts Supply and Disposition" table in the Summary Statistics, is now reported on a component basis (ethane, propane, normal butane, isobutane and pentanes plus). Most of these stocks will now appear in the "Liquefied Petroleum Gases Supply and Disposition" table of the Summary Statistics. This change will affect stocks reported and stock withdrawals in each table. Under the new basis, end-of-year 1983 stocks, in million barrels, would have been:

- Liquefied Petroleum Gases. 1983 - 108
- Other Petroleum Products: 1983 - 248

### **Note 11: Stocks of Alaskan Crude Oil**

Stocks of Alaskan crude oil in transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock withdrawal calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Other Primary).

### **Note 12: Changes in Petroleum Industry Reporting**

Petroleum statistics contained in this report for all years through 1980 were developed using definitions, concepts, reporting procedures and aggregation methods that are consistent with those developed by the U.S. Bureau of Mines. Research conducted by the Energy Information Administration in 1979 and 1980 indicated that changes had occurred in the petroleum industry that were not being adequately reflected in EIA's reporting systems.

EIA reporting forms, definitions, and procedures were modified beginning in January 1981 to describe industry operations more accurately. Unfortunately, empirical information is not available to precisely measure the data shortcomings throughout 1980. However, estimates of the magnitudes of differences in the major

data series are described below to form a basis for comparing 1979, 1980, and 1981 data.

### **Motor Gasoline**

Prior to 1979, the EIA product-supplied series for motor gasoline was consistently about 2 percent lower than the Federal Highway Administration (FHWA) gasoline-sales data series, which is derived from State tax receipts. This difference increased to about 4 percent in 1979 and 5 percent in 1980. There are two primary causes for this growing difference. First, refinery operations, particularly the flows of unfinished oils and the redesignation of some finished products, were not being accurately described on the EIA survey forms. Second, a large amount of gasoline was being produced away from refineries at "downstream blending stations" to take advantage of provisions in regulations governing the amount of lead that could be added. These blending stations were not reporting gasoline production to the EIA until the data system was changed in January 1981.

Quantitative estimates of the magnitude of the difference—in EIA's gasoline product supplied data in 1979 and 1980 have been made by the EIA and the American Petroleum Institute (API). The following table provides 1979 and 1980 data as published in the *Petroleum Statement Annual*, as well as EIA and API estimates of "recast" motor gasoline product supplied. EIA recast estimates were based upon preliminary monthly information in the *Monthly Petroleum Statement*. The ranges displayed in the EIA column reflect uncertainty in the estimates. Also shown are the FHWA motor gasoline sales statistics for those years. EIA has recently published a study of the quality of these FHWA data.<sup>1</sup>

<sup>1</sup>Office of Energy Information Validation, Energy Information Administration, U.S. Department of Energy, *Error Profile of the Motor Fuel Taxation Data used to Establish and Monitor State Emergency Conservation Targets* (Washington, D.C.: December, 1981).



**Finished Motor Gasoline Product Supplied on Old and New Basis  
(Thousand Barrels per Day)**

	1979				1980			
	EIA Reported	API Recast	EIA Recast	FHWA <sup>1</sup>	EIA Reported	API Recast	EIA Recast	FHWA <sup>1</sup>
Jan	6,830	7,230	7,084- 7,246	6,984	6,323	6,789	6,630- 6,791	6,672
Feb	7,254	7,496	7,389- 7,568	7,538	6,596	6,983	6,831- 7,003	6,830
Mar	7,229	7,414	7,301- 7,463	7,316	6,406	6,753	6,607- 6,768	6,713
Apr	7,055	7,300	7,187- 7,353	7,375	6,800	7,014	6,886- 7,052	6,981
May	7,213	7,429	7,313- 7,475	7,428	6,729	6,954	6,823- 6,984	7,044
Jun	7,191	7,483	7,350- 7,516	7,441	6,657	6,966	6,824- 6,991	7,049
Jul	6,902	7,241	7,105- 7,266	7,299	6,743	6,973	6,960	7,132
Aug	7,330	7,546	7,426- 7,588	7,619	6,648	6,841	6,828	7,090
Sep	6,881	7,122	7,016- 7,262	7,232	6,510	6,692	6,962	6,685
Nov	6,791	7,068	6,956- 7,122	7,142	6,234	6,507	6,516	6,951
Dec	6,730	7,106	6,966- 7,127	7,084	6,632	6,948	6,936	6,993
Average	7,034	7,302	7,183- 7,347	7,309	6,579	6,882	6,806- 6,889	6,925

<sup>1</sup>FHWA gasoline statistics published in their 1979 Table MF-33G, 08 06 80, contain aviation gasoline as well as motor gasoline. Only motor gasoline data are included in published 1980 data. Consequently, the 1979 data shown above were reduced by subtracting aviation gasoline product supplied quantities as published by EIA in the 1979 *Petroleum Statement Annual*. The 1980 FHWA data published in their 1980 Table MF-33GA, August 1981, did not require this adjustment.

### Distillate and Residual Fuel Oil

Distillate and residual fuel oil refinery production statistics through 1980 were adjusted to account for an imbalance between unfinished oil supply and disposition. The reported quantities of refinery inputs of unfinished oils typically exceed the available supply of unfinished oils. It has been assumed that this occurs when distillate and residual fuel oil produced by a refinery is shipped to another refinery, where it is treated as unfinished oil. This oil is then reprocessed rather than used or sold as distillate or residual fuel oil.

For many years (including 1980), the difference between unfinished oil disposition and supply was sub-

tracted from distillate and residual fuel oil production to adjust for this discrepancy. Two-thirds of the difference was applied to distillate, and one-third to residual fuel oil.

Beginning in January 1981 this adjustment was discontinued because there was not sufficient empirical evidence to support it. The following table presents distillate and residual fuel oil refinery production in 1980 as published (adjusted) and on the same basis as 1981 statistics are now being completed (unadjusted) to permit comparison between 1980 and 1981 data series. Adjusted distillate and residual fuel oil product supplied volumes differ from the unadjusted volumes by the same amounts as the adjusted and unadjusted production volumes.

**Adjusted and Unadjusted Refinery Production, and Unadjusted Product Supplied of Distillate and Residual Fuel Oils, by Month for 1979 and 1980 (Thousand Barrels Per Day)**

1979

Month	Distillate Fuel Oil				Residual Fuel Oil			
	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied
Jan.	3,043	3,108	65	4,646	1,912	1,946	34	3,594
Feb.	2,888	2,945	57	4,869	1,792	1,822	30	3,625
Mar.	3,019	3,026	7	3,671	1,719	1,723	4	3,243
Apr.	2,945	2,978	32	3,048	1,639	1,656	17	2,524
May	3,066	3,093	27	3,025	1,586	1,600	14	2,517
Jun.	3,153	3,187	35	2,743	1,548	1,566	18	2,601
Jul.	3,305	3,344	38	2,601	1,575	1,594	20	2,471
Aug.	3,321	3,359	38	2,799	1,584	1,603	20	2,570
Sep.	3,354	3,306	- 48	2,599	1,627	1,602	- 25	2,584
Oct.	3,251	3,217	- 34	3,085	1,629	1,612	- 17	2,523
Nov.	3,239	3,200	- 39	3,208	1,736	1,716	- 20	2,795
Dec.	3,221	3,238	17	3,725	1,894	1,903	9	3,022
Average	3,152	3,169	16	3,327	1,687	1,695	8	2,834

1980

Month	Distillate Fuel Oil				Residual Fuel Oil			
	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied	Adj. Ref. Prod.	Unadj. Ref. Prod.	Diff.	Unadj. Product Supplied
Jan.	3,013	3,093	80	3,794	1,771	1,812	41	3,108
Feb.	2,766	2,888	122	3,834	1,773	1,836	63	3,168
Mar.	2,557	2,690	133	3,312	1,584	1,652	68	2,726
Apr.	2,460	2,554	94	2,729	1,595	1,643	48	2,492
May	2,474	2,610	136	2,538	1,509	1,579	70	2,305
Jun.	2,646	2,721	75	2,392	1,575	1,613	38	2,359
Jul.	2,689	2,783	94	2,343	1,480	1,528	48	2,339
Aug.	2,461	2,582	121	2,258	1,444	1,506	62	2,348
Sep.	2,686	2,726	40	2,627	1,495	1,516	21	2,380
Oct.	2,589	2,650	61	2,981	1,512	1,543	31	2,258
Nov.	2,703	2,823	120	3,069	1,579	1,641	62	2,513
Dec.	2,891	3,052	161	3,776	1,660	1,743	83	2,762
Average	2,661	2,764	103	2,969	1,580	1,634	54	2,562

**Total Petroleum Products**

The imbalance between the supply and disposition of unfinished oils and gasoline blending components is included with other products (line 35) in the U.S. Petroleum Balance (Table 1). These imbalances are reported as negative product supplied in the Other Liquids sec-

tion, Supply and Disposition Statistics (Table 2). Since these changes only involve redistribution of the volumes of gasoline, distillate and residual fuel oil, gasoline blending components, and unfinished oils, the total volume of petroleum products supplied remains unaffected by them.

## Note 13: NGL Import/Export Algorithms

Beginning in January 1984, the Energy Information Administration (EIA) implemented changes in the reporting of natural gas liquid (NGL) supply data, moving from a nine-product slate to a five-component slate that corresponds to industry record-keeping practices. Changes could not be made to the import and export systems. Therefore, in order to allocate imports and exports of mixed NGL streams to individual component parts, the EIA developed a statistical algorithm.

## Imports

The imports algorithm is based on information gathered from the larger importers of NGL, who were asked to provide component analyses of the products they imported during the first six months of 1983. The percentages shown in Exhibit 1 are derived from the weighted averages of the data provided by the importers.

### EXHIBIT 1. ALGORITHMS FOR ALLOCATING NGL IMPORTS

PRODUCT SLATE	Ethane	Propane	Normal butane	Isobutane	Pentanes Plus
Natural Gasoline & Isopentane (EIA-814)					100%
Plant Condensate (EIA-814)					100%
Ethane (IM-145)	100%				
Butane (IM-145)			60%	40%	
Butane-Propane Mixtures (IM-145)		40%	35%	20%	5%
Ethane-Propane Mixtures (IM-145)	80%	20%			

## Exports

The export algorithm is based on information gathered from the larger exporters of NGL, who were asked to provide component analyses of the products they

exported during 1983. The percentages shown in Exhibit 2 are derived from the weighted averages of the data provided by the exporters. It was necessary to derive percentages by PAD of exportation, due to the wide variation of components in the mixed streams.

### EXHIBIT 2. ALGORITHMS FOR ALLOCATING NGL EXPORTS

PRODUCT	P.A.D.	Ethane	Propane	EIA Component Slate Normal Butane	Isobutane	Pentanes Plus
Ethane	All	100%				
Propane	All		100%			
Butane	All			100%		
Mixed Streams	I, IV, V II III	30%	40% 25% 80%	60% 15% 20%	15%	15%



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